

## DIPLOMATURA D'ESTADÍSTICA

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### **ISAX** (Interface for Seasonal Adjustment with X-12-ARIMA)

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ANEXO II(II)

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# **ANEXO II**

### 1.1.13. Xcheck.frm

VERSION 2.00

Begin Form Check

```

BackColor = &H00C0C0C0&
BorderStyle = 0 'None
ClientHeight = 4215
ClientLeft = 60
ClientTop = 2040
ClientWidth = 9060
ControlBox = 0 'False
Height = 4620
HelpContextID = 3
Left = 0
LinkTopic = "Form8"
MaxButton = 0 'False
MinButton = 0 'False
ScaleHeight = 4215
ScaleWidth = 9060
Top = 1695
Width = 9180

```

Begin SSPanel Panel3DCheck

```

BackColor = &H00C0C0C0&
Caption = " "
Font3D = 0 'None
Height = 4245
Left = 0
TabIndex = 1
Top = 0
Width = 9255

```

Begin SSCommand Command3DCheck

```

BevelWidth = 1
Caption = "&OK"
Font3D = 0 'None
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 375
HelpContextID = 3
Left = 7800
TabIndex = 0
Top = 3240
Width = 1095

```

End

Begin SSFrame Frame3DCheck

```

Caption = "Storage:"
Font3D = 0 'None
ForeColor = &H00000000&
Height = 1335
Index = 1
Left = 720
TabIndex = 5
Top = 2400
Width = 3495

```

Begin SSCheck Check3DCheckData

```

Caption = "Partial autocorrelation function"
Font3D = 0 'None
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 195
HelpContextID = 300
Index = 1
Left = 240
TabIndex = 7
Top = 840
Value = -1 'True

```

```

    Width      = 3135
End
Begin SSCheck Check3DCheckData
    Caption     = "Autocorrelation function"
    Font3D      = 0 'None
    FontBold    = 0 'False
    FontItalic  = 0 'False
    FontName    = "MS Sans Serif"
    FontSize    = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height      = 255
    HelpContextID = 300
    Index       = 0
    Left        = 240
    TabIndex    = 6
    Top         = 360
    Value       = -1 'True
    Width       = 2415
End
End
Begin SSFrame Frame3DCheck
    Caption     = "ACF / PACF:"
    Font3D      = 0 'None
    ForeColor   = &H00000000&
    Height      = 1455
    Index       = 0
    Left        = 720
    TabIndex    = 2
    Top         = 480
    Width       = 3495
Begin SpinButton SpinCheckMaxlag
    Height      = 375
    Left        = 2760
    Top         = 600
    Width       = 255
End
Begin TextBox TextCheckMaxlag
    Height      = 285
    HelpContextID = 301
    Left        = 2160
    TabIndex    = 3
    Text        = "36"
    Top         = 600
    Width       = 615
End
Begin Label Label
    BackStyle   = 0 'Transparent
    Caption     = "Number of flags:"
    FontBold    = 0 'False
    FontItalic  = 0 'False
    FontName    = "MS Sans Serif"
    FontSize    = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height      = 255
    Index       = 0
    Left        = 360
    TabIndex    = 4
    Top         = 600
    Width       = 1575
End
End
Begin Label Label
    AutoSize    = -1 'True
    BackStyle   = 0 'Transparent
    Caption     = "1/1"
    Height      = 195
    Index       = 4
    Left        = 8700
    TabIndex    = 8
    Top         = 120
    Width       = 315

```

```

End
End
End
Option Explicit

Sub cargiar_check ()
Dim X%

For x% = 0 To 1
' Frame3DCheck(x%) = (getvar("check", "frame" & x%))
'Next x%
TextCheckMaxlag = (getvar("check", "textmaxlag"))
'SpinCheckMaxlag = Val(getvar("check", "spinmaxlag"))
For X% = 0 To 1
Check3DCheckData(X%) = Val(getvar("check", "save" & X%))
Next X%

End Sub

Sub command3dcheck_click ()
Dim X%

'Call cancel_button
'GUARDAR
checkcargar(11) = "yes"
Call setvar("check", "cargar", checkcargar(11))
For X% = 0 To 1
Call setvar("check", "frame" & X%, Frame3DCheck(X%))
Next X%
Call setvar("check", "textmaxlag", TextCheckMaxlag)
'Call setvar("check", "spinmaxlag", spincheckmaxlag)
For X% = 0 To 1
Call setvar("check", "save" & X%, Check3DCheckData(X%))
Next X%

End Sub

Sub Form_Load ()

'If checkcargar(11) = "yes" Then
Call cargiar_check
'End If

Call command3dcheck_click

End Sub

Sub SpinCheckMaxlag_SpinDown ()

If Val(TextCheckMaxlag.Text) > 0 Then
TextCheckMaxlag.Text = TextCheckMaxlag.Text - 1
End If

End Sub

Sub SpinCheckMaxlag_SpinUp ()

'no hay número máximo de retardos????
TextCheckMaxlag.Text = TextCheckMaxlag.Text + 1

End Sub

Sub TextCheckMaxlag_KeyPress (keyascii As Integer)

keyascii = validar(keyascii)

End Sub

Sub TextCheckMaxlag_LostFocus ()

If Val(TextCheckMaxlag.Text) < 0 Then
'mensaje de error
response% = MsgBox("It must be a positive number", 48, title$)

```

```
TextCheckMaxlag.SetFocus  
End If  
'mirar si hay nº máx. de retardos o no !!!!!  
  
End Sub
```

## 1.1.14. Xforecast.frm

VERSION 2.00

Begin Form Forecast

```

BackColor = &H00C0C0C0&
BorderStyle = 0 'None
ClientHeight = 4230
ClientLeft = 60
ClientTop = 1425
ClientWidth = 9060
ControlBox = 0 'False
Height = 4635
HelpContextID = 6
Left = 0
LinkTopic = "Form9"
MaxButton = 0 'False
MinButton = 0 'False
ScaleHeight = 4230
ScaleWidth = 9060
Top = 1080
Width = 9180

```

Begin SSPanel Panel3DForecast

```

BackColor = &H00C0C0C0&
Caption = " "
Font3D = 0 'None
Height = 4250
Left = 0
TabIndex = 1
Top = 0
Width = 9255

```

Begin SSCommand Command3DForecast

```

BevelWidth = 1
Caption = "&OK"
Font3D = 0 'None
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 375
HelpContextID = 6
Left = 7860
TabIndex = 0
Top = 3240
Width = 1095

```

End

Begin SSFrame Frame3DForecast

```

Caption = "Storage:"
Font3D = 0 'None
ForeColor = &H00000000&
Height = 1455
Left = 360
TabIndex = 6
Top = 2400
Width = 5835

```

Begin SSCheck Check3DForecast

```

Caption = "Forecasts on the original scale with upper and lower limits"
Font3D = 0 'None
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 195
HelpContextID = 600
Index = 2
Left = 240
TabIndex = 9
Top = 1080
Value = -1 'True
Width = 4395

```

```

End
Begin SSCheck Check3DForecast
    Caption      = "Forecast error variances on the transformed scale"
    Font3D       = 0 'None
    FontBold     = 0 'False
    FontItalic   = 0 'False
    FontName     = "MS Sans Serif"
    FontSize     = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height       = 195
    HelpContextID = 600
    Index        = 1
    Left         = 240
    TabIndex     = 8
    Top          = 720
    Value        = -1 'True
    Width        = 4035
End
Begin SSCheck Check3DForecast
    Caption      = "Forecasts on the transformed scale with standard errors"
    Font3D       = 0 'None
    FontBold     = 0 'False
    FontItalic   = 0 'False
    FontName     = "MS Sans Serif"
    FontSize     = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height       = 195
    HelpContextID = 600
    Index        = 0
    Left         = 240
    TabIndex     = 7
    Top          = 360
    Value        = -1 'True
    Width        = 4515
End
End
Begin SpinButton SpinForecast
    Height       = 375
    Index        = 2
    Left         = 3900
    Top          = 1920
    Width        = 255
End
Begin TextBox TextForecast
    Height       = 285
    HelpContextID = 604
    Index        = 2
    Left         = 3360
    TabIndex     = 5
    Text         = "0"
    Top          = 1920
    Width        = 555
End
Begin TextBox TextForecast
    Height       = 285
    HelpContextID = 603
    Index        = 3
    Left         = 3360
    TabIndex     = 4
    Text         = "0.95"
    Top          = 1380
    Width        = 735
End
Begin SpinButton SpinForecast
    Height       = 375
    Index        = 1
    Left         = 3900
    Top          = 840
    Width        = 255
End
Begin SpinButton SpinForecast

```



```

Height      = 375
Index       = 0
Left        = 3900
Top         = 360
Width       = 255
End
Begin TextBox TextForecast
Height      = 285
HelpContextID = 602
Index       = 1
Left        = 3360
TabIndex    = 3
Text        = "0"
Top         = 840
Width       = 555
End
Begin TextBox TextForecast
Height      = 285
HelpContextID = 601
Index       = 0
Left        = 3360
TabIndex    = 2
Top         = 360
Width       = 555
End
Begin Label Label
AutoSize    = -1 'True
BackStyle   = 0 'Transparent
Caption     = "1/1"
Height      = 195
Index       = 4
Left        = 8700
TabIndex    = 14
Top         = 120
Width       = 315
End
Begin Label Label
BackStyle   = 0 'Transparent
Caption     = "Number of obs. excluded before forecasting: "
FontBold    = 0 'False
FontItalic  = 0 'False
FontName    = "MS Sans Serif"
FontSize    = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height      = 435
Index       = 1
Left        = 420
TabIndex    = 13
Top         = 1860
Width       = 2655
End
Begin Label Label
BackStyle   = 0 'Transparent
Caption     = "Probability of prediction intervals:"
FontBold    = 0 'False
FontItalic  = 0 'False
FontName    = "MS Sans Serif"
FontSize    = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height      = 195
Index       = 98
Left        = 420
TabIndex    = 12
Top         = 1380
Width       = 2475
End
Begin Label Label
BackStyle   = 0 'Transparent
Caption     = "Number of backcasts:"
FontBold    = 0 'False
FontItalic  = 0 'False

```

```

    FontName      = "MS Sans Serif"
    FontSize      = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height        = 195
    Index         = 87
    Left          = 420
    TabIndex      = 11
    Top           = 840
    Width         = 2115
End
Begin Label Label
    BackStyle     = 0 'Transparent
    Caption       = "Number of forecasts:"
    FontBold      = 0 'False
    FontItalic    = 0 'False
    FontName      = "MS Sans Serif"
    FontSize      = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height        = 195
    Index         = 76
    Left          = 420
    TabIndex      = 10
    Top           = 360
    Width         = 1635
End
End
Option Explicit

Sub cargar_forecast ()
    Dim X%

    For X% = 0 To 3
        TextForecast(X%) = (getvar("forecast", "textforecast" & X%))
    Next X%
    For x% = 0 To 2
        'SpinForecast(x%) = Val(getvar("forecast", "spinforecast" & x%))
    Next x%
    Frame3DForecast = (getvar("forecast", "frame"))
    For X% = 0 To 2
        Check3DForecast(X%) = Val(getvar("forecast", "save" & X%))
    Next X%
End Sub

Sub command3dforecast_click ()
    Dim X%

    'Call cancel_button
    'GUARDAR
    checkcargar(12) = "yes"
    Call setvar("forecast", "cargar", checkcargar(12))
    For X% = 0 To 3
        Call setvar("forecast", "textforecast" & X%, TextForecast(X%))
    Next X%
    For x% = 0 To 2
        'Call setvar("forecast", "spinforecast" & x%, spinforecast(x%))
    Next x%
    Call setvar("forecast", "frame", Frame3DForecast)
    For X% = 0 To 2
        Call setvar("forecast", "save" & X%, Check3DForecast(X%))
    Next X%
End Sub

Sub Form_Load ()

    If checkcargar(12) = "yes" Then
        Call cargar_forecast
    Else
        inicializar_forecast
    End If
End Sub

```

**End If**

Call command3dforecast\_click

**End Sub**

**Sub** SpinForecast\_SpinDown (Index As Integer)

If Val(TextForecast(Index).Text) > 0 Then

TextForecast(Index).Text = TextForecast(Index).Text - 1

**End If**

**End Sub**

**Sub** SpinForecast\_SpinUp (Index As Integer)

**Select Case** Index

Case 0 'maxlead

If TextForecast(0).Text < 60 Then

TextForecast(0).Text = TextForecast(0).Text + 1

**End If**

Case 1 'maxback

If TextForecast(1).Text < 60 Then

TextForecast(1).Text = TextForecast(1).Text + 1

**End If**

Case 2 'exclude

'mirar el n° máx. de valores excluidos

TextForecast(2).Text = TextForecast(2).Text + 1

**End Select**

**End Sub**

**Sub** TextForecast\_KeyPress (Index As Integer, keyascii As Integer)

keyascii = validar(keyascii)

**End Sub**

**Sub** TextForecast\_LostFocus (Index As Integer)

**Select Case** Index

Case 0 'maxlead

If Val(TextForecast(0).Text) < 0 Then

'mensaje de error

response% = MsgBox("It must be a number from 0 to 60", 48, title\$)

TextForecast(0).SetFocus

**End If**

If Val(TextForecast(0).Text) > 60 Then

'mensaje de error

response% = MsgBox("It must be a number from 0 to 60", 48, title\$)

TextForecast(0).SetFocus

**End If**

Case 1 'maxback

If Val(TextForecast(1).Text) <= 0 Then

'mensaje de error

response% = MsgBox("It must be a number from 0 to 60", 48, title\$)

TextForecast(1).SetFocus

**End If**

If Val(TextForecast(1).Text) > 60 Then

'mensaje de error

response% = MsgBox("It must be a number from 0 to 60", 48, title\$)

TextForecast(1).SetFocus

**End If**

Case 2 'exclude

If Val(TextForecast(2).Text) < 0 Then

'mensaje de error

response% = MsgBox("It must be a positive number", 48, title\$)

TextForecast(2).SetFocus

**End If**

'mirar el n° máx. de valores excluidos

Case 3 'probability

'mirar los limites inferior y superior ??????

'mensaje de error

End Select

End Sub

## **1.1.15. Xregadjust.frm**

VERSION 2.00

Begin Form Regadjust

```

BackColor = &H00C0C0C0&
BorderStyle = 0 'None
ClientHeight = 4215
ClientLeft = 105
ClientTop = 1695
ClientWidth = 9060
ControlBox = 0 'False
Height = 4620
HelpContextID = 10
Left = 45
LinkTopic = "Form1"
MaxButton = 0 'False
MinButton = 0 'False
ScaleHeight = 4215
ScaleWidth = 9060
Top = 1350
Width = 9180

```

Begin SSPanel Panel3DRegadjust

```

Alignment = 6 'Center - TOP
BackColor = &H00C0C0C0&
Font3D = 0 'None
ForeColor = &H000000FF&
Height = 4250
Index = 0
Left = 0
TabIndex = 1
Top = 0
Width = 9255

```

Begin SSCommand Command3DRegadjust

```

BevelWidth = 1
Caption = "&Next"
Font3D = 0 'None
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
ForeColor = &H00000000&
Height = 375
HelpContextID = 10
Index = 0
Left = 7800
TabIndex = 0
Top = 3240
Width = 1095

```

End

Begin SSFrame Frame3DRegadjust

```

Enabled = 0 'False
Font3D = 0 'None
ForeColor = &H00000000&
Height = 2775
Index = 0
Left = 360
TabIndex = 4
Top = 720
Width = 6615

```

Begin SSCheck Check3DRegadjustPrior

```

Caption = "All the user-defined regression variables"
Font3D = 0 'None
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 195
HelpContextID = 1006
Index = 9

```

```

Left      = 180
TabIndex  = 9
Top       = 2280
Width     = 3795
End
Begin SSCheck Check3DRegadjustPrior
Caption   = "Constant level shift"
Font3D    = 0 'None
FontBold  = 0 'False
FontItalic = 0 'False
FontName  = "MS Sans Serif"
FontSize  = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height    = 195
HelpContextID = 1005
Index     = 7
Left      = 180
TabIndex  = 8
Top       = 1800
Width     = 2175
End
Begin SSCheck Check3DRegadjustPrior
Caption   = "Additive outlier"
Font3D    = 0 'None
FontBold  = 0 'False
FontItalic = 0 'False
FontName  = "MS Sans Serif"
FontSize  = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height    = 195
HelpContextID = 1004
Index     = 6
Left      = 180
TabIndex  = 7
Top       = 1320
Width     = 1755
End
Begin SSCheck Check3DRegadjustPrior
Caption   = "Holiday"
Font3D    = 0 'None
FontBold  = 0 'False
FontItalic = 0 'False
FontName  = "MS Sans Serif"
FontSize  = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height    = 195
Index     = 3
Left      = 180
TabIndex  = 6
Top       = 840
Width     = 975
End
Begin SSCheck Check3DRegadjustPrior
Caption   = "Trading day with six trading-day contrast variables"
Font3D    = 0 'None
FontBold  = 0 'False
FontItalic = 0 'False
FontName  = "MS Sans Serif"
FontSize  = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height    = 195
HelpContextID = 1002
Index     = 0
Left      = 180
TabIndex  = 5
Top       = 360
Width     = 4695
End
End

```

Begin SSCheck Check3DRegadjustPriorVar

Font3D = 0 'None  
Height = 195  
HelpContextID = 1001  
Left = 360  
TabIndex = 2  
Top = 240  
Width = 195

End

Begin Label Label

AutoSize = -1 'True  
BackStyle = 0 'Transparent  
Caption = "1/4"  
Height = 195  
Index = 3  
Left = 8700  
TabIndex = 37  
Top = 120  
Width = 315

End

Begin Label Label

BackStyle = 0 'Transparent  
Caption = "Regression effects to adjust the series before seasonal adjustment:"  
Height = 435  
Index = 0  
Left = 600  
TabIndex = 3  
Top = 240  
Width = 3315

End

End

Begin SSPanel Panel3DRegadjust

Alignment = 6 'Center - TOP  
BackColor = &H00C0C0C0&  
Font3D = 0 'None  
ForeColor = &H000000FF&  
Height = 4250  
Index = 1  
Left = 0  
TabIndex = 10  
Top = 0  
Width = 9255

Begin SSCommand Command3DRegadjust

BevelWidth = 1  
Caption = "&Back"  
Font3D = 0 'None  
FontBold = 0 'False  
FontItalic = 0 'False  
FontName = "MS Sans Serif"  
FontSize = 8.25  
FontStrikethru = 0 'False  
FontUnderline = 0 'False  
ForeColor = &H00000000&  
Height = 375  
Index = 4  
Left = 7800  
TabIndex = 33  
Top = 3720  
Width = 1095

End

Begin SSCommand Command3DRegadjust

BevelWidth = 1  
Caption = "&Next"  
Font3D = 0 'None  
FontBold = 0 'False  
FontItalic = 0 'False  
FontName = "MS Sans Serif"  
FontSize = 8.25  
FontStrikethru = 0 'False  
FontUnderline = 0 'False  
ForeColor = &H00000000&  
Height = 375  
Index = 1

```

Left      = 7800
TabIndex  = 18
Top       = 3240
Width     = 1095
End
Begin SSFrame Frame3DRegadjust
Enabled   = 0 'False
Font3D    = 0 'None
ForeColor = &H00000000&
Height    = 2415
Index     = 1
Left      = 300
TabIndex  = 13
Top       = 840
Width     = 6315
Begin SSCheck Check3DRegadjustFinal
Caption   = "All the user-defined regression variables"
Font3D    = 0 'None
FontBold  = 0 'False
FontItalic = 0 'False
FontName  = "MS Sans Serif"
FontSize  = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height    = 195
HelpContextID = 1006
Index     = 6
Left      = 240
TabIndex  = 17
Top       = 1800
Width     = 3735
End
Begin SSCheck Check3DRegadjustFinal
Caption   = "Constant level shift"
Font3D    = 0 'None
FontBold  = 0 'False
FontItalic = 0 'False
FontName  = "MS Sans Serif"
FontSize  = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height    = 195
HelpContextID = 1005
Index     = 4
Left      = 240
TabIndex  = 16
Top       = 1320
Width     = 1935
End
Begin SSCheck Check3DRegadjustFinal
Caption   = "Additive outlier"
Font3D    = 0 'None
FontBold  = 0 'False
FontItalic = 0 'False
FontName  = "MS Sans Serif"
FontSize  = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height    = 195
HelpContextID = 1004
Index     = 3
Left      = 240
TabIndex  = 15
Top       = 840
Width     = 1635
End
Begin SSCheck Check3DRegadjustFinal
Caption   = "Holiday"
Font3D    = 0 'None
FontBold  = 0 'False
FontItalic = 0 'False
FontName  = "MS Sans Serif"
FontSize  = 8.25

```



```

    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height = 195
    HelpContextID = 1003
    Index = 0
    Left = 240
    TabIndex = 14
    Top = 360
    Width = 1635
End
End
Begin SSCheck Check3DRegadjustFinalVar
    Font3D = 0 'None
    Height = 195
    HelpContextID = 1007
    Left = 300
    TabIndex = 11
    Top = 240
    Width = 195
End
Begin Label Label
    AutoSize = -1 'True
    BackStyle = 0 'Transparent
    Caption = "2/4"
    Height = 195
    Index = 4
    Left = 8700
    TabIndex = 38
    Top = 120
    Width = 315
End
Begin Label Label
    BackStyle = 0 'Transparent
    Caption = "Regression effects to be removed from the final seasonally adjusted series:"
    Height = 435
    Index = 1
    Left = 540
    TabIndex = 12
    Top = 240
    Width = 3375
End
End
Begin SSPanel Panel3DRegadjust
    BackColor = &H00C0C0C0&
    Font3D = 0 'None
    ForeColor = &H000000FF&
    Height = 4255
    Index = 2
    Left = 0
    TabIndex = 30
    Top = 0
    Width = 9255
End
Begin SSFrame Frame3DRegadjust
    Enabled = 0 'False
    Font3D = 0 'None
    ForeColor = &H00000000&
    Height = 2655
    Index = 3
    Left = 420
    TabIndex = 40
    Top = 480
    Width = 6015
End
Begin ListBox ListChoices
    Height = 1785
    HelpContextID = 1008
    Left = 4800
    TabIndex = 46
    Top = 600
    Width = 1095
End
Begin ListBox ListDifferent
    Height = 1200
    HelpContextID = 1008

```

```

Left      = 480
TabIndex = 44
Top       = 1200
Visible   = 0 'False
Width     = 1095
End
Begin SSOOption Option3Duser
Caption   = "Different type for each user-defined variable"
Font3D    = 0 'None
FontBold  = 0 'False
FontItalic = 0 'False
FontName  = "MS Sans Serif"
FontSize  = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height    = 195
HelpContextID = 1008
Index     = 1
Left      = 240
TabIndex  = 42
TabStop   = 0 'False
Top       = 660
Width     = 3435
End
Begin SSOOption Option3Duser
Caption   = "Same type for all the user-defined variables"
Font3D    = 0 'None
FontBold  = 0 'False
FontItalic = 0 'False
FontName  = "MS Sans Serif"
FontSize  = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height    = 195
HelpContextID = 1008
Index     = 0
Left      = 240
TabIndex  = 41
Top       = 360
Value     = -1 'True
Width     = 3495
End
Begin Label Label
BorderStyle = 1 'Fixed Single
Height      = 255
Index       = 8
Left        = 3840
TabIndex    = 47
Top         = 360
Width       = 855
End
Begin Label Label
BackStyle   = 0 'Transparent
Caption     = "Choices:"
FontBold    = 0 'False
FontItalic  = 0 'False
FontName    = "MS Sans Serif"
FontSize    = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height      = 255
Index       = 7
Left        = 4800
TabIndex    = 45
Top         = 360
Width       = 735
End
Begin Label Label
BackStyle   = 0 'Transparent
Height      = 255
Index       = 6
Left        = 480
TabIndex    = 43

```

```

    Top      = 960
    Visible  = 0 'False
    Width    = 2535
End
End
Begin ComboBox ComboRegadjustAugmentusertd
    Height   = 300
    HelpContextID = 1009
    Left      = 480
    Style     = 2 'Dropdown List
    TabIndex  = 19
    Top       = 3600
    Width     = 5175
End
Begin SSCommand Command3DRegadjust
    BevelWidth = 1
    Caption    = "&Back"
    Font3D     = 0 'None
    FontBold   = 0 'False
    FontItalic = 0 'False
    FontName   = "MS Sans Serif"
    FontSize   = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    ForeColor  = &H00000000&
    Height     = 375
    Index      = 5
    Left       = 7800
    TabIndex   = 34
    Top        = 3720
    Width      = 1095
End
Begin SSCheck Check3DUser
    Caption    = "Type of model-estimated effect for the user regression variables:"
    Font3D     = 0 'None
    Height     = 255
    HelpContextID = 1008
    Left       = 420
    TabIndex   = 32
    Top        = 240
    Width      = 5835
End
Begin SSCommand Command3DRegadjust
    BevelWidth = 1
    Caption    = "&Next"
    Font3D     = 0 'None
    FontBold   = 0 'False
    FontItalic = 0 'False
    FontName   = "MS Sans Serif"
    FontSize   = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    ForeColor  = &H00000000&
    Height     = 375
    Index      = 2
    Left       = 7800
    TabIndex   = 31
    Top        = 3240
    Width      = 1095
End
Begin Label Label
    BackStyle  = 0 'Transparent
    Caption    = "Trading day adjustment factors:"
    Height     = 195
    Index      = 2
    Left       = 480
    TabIndex   = 20
    Top        = 3360
    Width      = 2835
End
Begin Label Label
    AutoSize   = -1 'True
    BackStyle  = 0 'Transparent

```

```

Caption      = "3/4"
Height       = 195
Index        = 5
Left         = 8700
TabIndex     = 39
Top          = 120
Width        = 315
End
End
Begin SSPanel Panel3DRegadjust
Alignment    = 6 'Center - TOP
BackColor    = &H00C0C0C0&
Font3D       = 0 'None
ForeColor    = &H000000FF&
Height       = 4250
Index        = 3
Left         = 0
TabIndex     = 21
Top          = 0
Width        = 9255
Begin SSCommand Command3DRegadjust
BevelWidth   = 1
Caption      = "&Back"
Font3D       = 0 'None
FontBold     = 0 'False
FontItalic   = 0 'False
FontName     = "MS Sans Serif"
FontSize     = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
ForeColor    = &H00000000&
Height       = 375
Index        = 6
Left         = 7800
TabIndex     = 35
Top          = 3720
Width        = 1095
End
Begin SSFrame Frame3DRegadjust
Caption      = "Storage:"
Font3D       = 0 'None
ForeColor    = &H00000000&
Height       = 2295
Index        = 2
Left         = 360
TabIndex     = 23
Top          = 480
Width        = 4455
Begin SSCheck Check3DRegadjustSave
Caption      = "Original series adjusted for regARIMA outliers"
Font3D       = 0 'None
FontBold     = 0 'False
FontItalic   = 0 'False
FontName     = "MS Sans Serif"
FontSize     = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height       = 195
HelpContextID = 1000
Index        = 5
Left         = 240
TabIndex     = 29
Top          = 1860
Width        = 3555
End
Begin SSCheck Check3DRegadjustSave
Caption      = "Factors from user-defined regression variables"
Font3D       = 0 'None
FontBold     = 0 'False
FontItalic   = 0 'False
FontName     = "MS Sans Serif"
FontSize     = 8.25
FontStrikethru = 0 'False

```

```

FontUnderline = 0 'False
Height        = 195
HelpContextID = 1000
Index         = 4
Left          = 240
TabIndex      = 28
Top           = 1560
Value         = -1 'True
Width         = 3555
End
Begin SSCheck Check3DRegadjustSave
Caption       = "RegARIMA holiday factors"
Font3D        = 0 'None
FontBold      = 0 'False
FontItalic    = 0 'False
FontName      = "MS Sans Serif"
FontSize      = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height        = 195
HelpContextID = 1000
Index         = 3
Left          = 240
TabIndex      = 27
Top           = 1260
Value         = -1 'True
Width         = 2775
End
Begin SSCheck Check3DRegadjustSave
Caption       = "RegARIMA trading day factors"
Font3D        = 0 'None
FontBold      = 0 'False
FontItalic    = 0 'False
FontName      = "MS Sans Serif"
FontSize      = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height        = 195
HelpContextID = 1000
Index         = 2
Left          = 240
TabIndex      = 26
Top           = 960
Value         = -1 'True
Width         = 2775
End
Begin SSCheck Check3DRegadjustSave
Caption       = "RegARIMA level change and ramp factors"
Font3D        = 0 'None
FontBold      = 0 'False
FontItalic    = 0 'False
FontName      = "MS Sans Serif"
FontSize      = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height        = 195
HelpContextID = 1000
Index         = 1
Left          = 240
TabIndex      = 25
Top           = 660
Value         = -1 'True
Width         = 3375
End
Begin SSCheck Check3DRegadjustSave
Caption       = "RegARIMA additive outlier factors"
Font3D        = 0 'None
FontBold      = 0 'False
FontItalic    = 0 'False
FontName      = "MS Sans Serif"
FontSize      = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False

```

```

    Height      = 195
    HelpContextID = 1000
    Index       = 0
    Left        = 240
    TabIndex    = 24
    Top         = 360
    Value       = -1 'True
    Width       = 2775
End
End
Begin SSCommand Command3DRegadjust
    BevelWidth   = 1
    Caption      = "&OK"
    Font3D       = 0 'None
    FontBold     = 0 'False
    FontItalic   = 0 'False
    FontName     = "MS Sans Serif"
    FontSize     = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    ForeColor    = &H00000000&
    Height       = 375
    Index        = 3
    Left         = 7800
    TabIndex     = 22
    Top          = 3240
    Width        = 1095
End
Begin Label Label
    AutoSize     = -1 'True
    BackStyle    = 0 'Transparent
    Caption      = "4/4"
    Height       = 195
    Index        = 11
    Left         = 8700
    TabIndex     = 36
    Top          = 120
    Width        = 315
End
End
Option Explicit

Sub cargar_regadjust ()
Dim X%

Check3DRegadjustPriorVar = Val(getvar("regadjust", "checkpriorvar"))
For X% = 0 To 2
' Frame3DRegadjust(X%) = (getvar("regadjust", "frame" & X%))
Next X%
For X% = 0 To 9
    Select Case X% 'n
        Case 0, 3, 6, 7, 9 'n
            Check3DRegadjustPrior(X%) = Val(getvar("regadjust", "checkprior" & X%))
        End Select 'n
    Next X%
Check3DRegadjustFinalVar = Val(getvar("regadjust", "checkfinalvar"))
For X% = 0 To 6
    Select Case X% 'n
        Case 0, 3, 4, 6'n
            Check3DRegadjustFinal(X%) = Val(getvar("regadjust", "checkfinal" & X%))
        End Select 'n
    Next X%
ComboRegadjustAugmentusertd.ListIndex = Val(getvar("regadjust", "augmentusertd"))
'ComboRegadjustAugmentusertd = Val(getvar("regadjust", "augmentusertd"))
For X% = 0 To 5
    Check3DRegadjustSave(X%) = Val(getvar("regadjust", "save" & X%))
Next X%
For X% = 0 To 11 'n
'Select Case X% 'n
'    Case 0, 1, 2, 3, 5, 6 'n
        listchoices.AddItem (getvar("regadjust", "listchoices" & X%))
    End Select 'n

```

```

Next X%
check3duser = Val(getvar("regadjust", "checkuser"))
For X% = 0 To 1
    option3duser(X%) = Val(getvar("regadjust", "optionuser" & X%))
Next X%
label(6) = (getvar("regadjust", "label6"))
label(6).Caption = Val(getvar("regadjust", "maxuser")) + 1 & " regression variables"
label(8) = (getvar("regadjust", "label8"))
maxuser% = Val(getvar("regadjust", "maxuser"))

If (getvar("regadjust", "listdifferent0")) <> "" Then
    listdifferent.List(0) = (getvar("regadjust", "listdifferent0"))
End If
For X% = 1 To maxuser% - 1
    listdifferent.List(X%) = (getvar("regadjust", "listdifferent" & X%))
Next X%

End Sub

Sub command3dregadjust_click (Index As Integer)
Dim X%, l1%, maxuser%
ReDim l2(20)

Select Case Index
Case 0 'next primer panel regadjust
    panel3dregadjust(1).ZOrder
Case 1 'next segundo panel regadjust
    panel3dregadjust(2).ZOrder
Case 2 'cancel segundo panel regadjust
    panel3dregadjust(3).ZOrder
Case 3 'ok tercer panel de regadjust
    checkcargar(13) = "yes"
    Call setvar("regadjust", "cargar", checkcargar(13))
    Call setvar("regadjust", "checkpriorvar", Check3DRegadjustPriorVar)
    For X% = 0 To 2
        Call setvar("regadjust", "frame" & X%, frame3dregadjust(X%))
    Next X%
    For X% = 0 To 9
        Select Case X% 'n
            Case 0, 3, 6, 7, 9 'n
                Call setvar("regadjust", "checkprior" & X%, Check3DRegadjustPrior(X%))
        End Select 'n
    Next X%
    Call setvar("regadjust", "checkfinalvar", Check3DRegadjustFinalVar)
    For X% = 0 To 6
        Select Case X% 'n
            Case 0, 3, 4, 6 'n
                Call setvar("regadjust", "checkfinal" & X%, Check3DRegadjustFinal(X%))
        End Select 'n
    Next X%
    l1 = ComboRegadjustAugmentusertd.ListIndex
    Call setvar("regadjust", "augmentusertd", l1)
    Call setvar("regadjust", "augmentusertd", comboregadjustaugmentusertd)
    For X% = 0 To 5
        Call setvar("regadjust", "save" & X%, Check3DRegadjustSave(X%))
    Next X%
    Call setvar("regadjust", "checkuser", check3duser)
    For X% = 0 To 1
        Call setvar("regadjust", "optionuser" & X%, option3duser(X%))
    Next X%
    Call setvar("regadjust", "label6", label(6))
    Call setvar("regadjust", "label8", label(8))
    maxuser% = listdifferent.ListCount
    Call setvar("regadjust", "maxuser", maxuser%)
    For X% = 0 To maxuser%
        l2(X%) = listdifferent.List(X%)
        Call setvar("regadjust", "listdifferent" & X%, l2(X%))
    Next X%
Case 4 'back segundo panel
    panel3dregadjust(0).ZOrder
Case 5 'back tercer panel
    panel3dregadjust(1).ZOrder
Case 6 'back cuarto panel

```

```

    panel3dregadjust(2).ZOrder
End Select
End Sub

```

```

Sub Check3DRegadjustFinalVar_Click (Value As Integer)
Dim i%

If Value = False Then
For i% = 0 To 6
    Select Case i% 'n
        Case 0, 3, 4, 6 'n
            Check3DRegadjustFinal(i%).Value = False
        End Select 'n
    Next i%
End If
frame3dregadjust(1).Enabled = Value

End Sub

```

```

Sub Check3DRegadjustPriorVar_Click (Value As Integer)
Dim i%

If Value = False Then
For i% = 0 To 9
    Select Case i% 'n
        Case 0, 3, 6, 7, 9 'n
            Check3DRegadjustPrior(i%).Value = False
        End Select 'n
    Next i%
End If
frame3dregadjust(0).Enabled = Value

End Sub

```

```

Sub Check3DUser_Click (Value As Integer)

Select Case Value
Case True
    If (getvar("regression", "maxuser")) <> "" And Val(getvar("regression", "maxuser")) >= 0 And Val(getvar("regression",
"checkuservar")) <> 0 Then
        frame3dregadjust(3).Enabled = True
        listdifferent.Enabled = True
        label(8).Enabled = True
    Else
        response = MsgBox("You don't have any user regression variable", 48, title)
        check3duser.Value = False
    End If
Case False
    listdifferent.Enabled = False
    label(8).Enabled = False
    frame3dregadjust(3).Enabled = False
End Select

End Sub

```

```

End Sub

```

```

Sub Form_Load ()

    panel3dregadjust(0).ZOrder

    Call combo_regadjust

    'If checkcargar(13) = "yes" Then
        Call cargar_regadjust
    'End If

    Call command3dregadjust_click(3)

End Sub

```

```

End Sub

```

```

Sub Label_Click (Index As Integer)
Dim i%

Select Case Index

```



```

Case 0
    Check3DRegadjustPriorVar.Value = Not (Check3DRegadjustPriorVar.Value)
Case 1
    Check3DRegadjustFinalVar.Value = Not (Check3DRegadjustFinalVar.Value)
End Select

frame3dregadjust(0).Enabled = Check3DRegadjustPriorVar.Value
frame3dregadjust(1).Enabled = Check3DRegadjustFinalVar.Value

End Sub

Sub ListChoices_DblClick ()

    If option3duser(0).Value = True Then
        If (getvar("regression", "maxuser")) <> "" And Val(getvar("regression", "maxuser")) >= 0 And Val(getvar("regression",
"checkuservar")) <> 0 Then
            label(8).Caption = listchoices.List(listchoices.ListIndex)
        Else
            response = MsgBox("You don't have any user regression variable", 48, title)
            check3duser.Value = False
            label(6).Visible = False
            label(8).Visible = False
            listdifferent.Visible = False
            listchoices.ListIndex = -1
        End If
    End If

    If option3duser(1).Value = True Then
        If (getvar("regression", "maxuser")) <> "" And Val(getvar("regression", "maxuser")) >= 0 And Val(getvar("regression",
"checkuservar")) <> 0 Then
            If listdifferent.ListCount <= Val(getvar("regression", "maxuser")) Then
                listdifferent.AddItem listchoices.List(listchoices.ListIndex)
            Else
                response = MsgBox("You only have " & Val(getvar("regression", "maxuser")) + 1 & " regression variables", 48, title)
            End If
        Else
            response = MsgBox("You don't have any user regression variable", 48, title)
            check3duser.Value = False
            label(6).Visible = False
            label(8).Visible = False
            listdifferent.Visible = False
            listchoices.ListIndex = -1
        End If
    End If

End Sub

Sub ListDifferent_KeyDown (keycode As Integer, Shift As Integer)

    Select Case keycode
        Case 46 'suprimir
            listdifferent.RemoveItem listdifferent.ListIndex
    End Select

End Sub

Sub Option3Duser_Click (Index As Integer, Value As Integer)

    Select Case Index
        Case 0 'same type
            Select Case Value
                Case True
                    label(6).Visible = False
                    listdifferent.Visible = False
                    label(8).Visible = True
                Case False
                    label(8).Visible = False
                    label(6).Visible = True
                    listdifferent.Visible = True
            End Select
            If (getvar("regression", "maxuser")) <> "" And Val(getvar("regression", "maxuser")) >= 0 And Val(getvar("regression",
"checkuservar")) <> 0 Then
                label(6).Caption = Val(getvar("regression", "maxuser")) + 1 & " regression variables"
            Else
                label(6).Caption = "0 regression variables"
            End If
        End Select
    End Select
End Sub

```

```

    End If
End Select
Case 1 'different type
Select Case Value
Case True
    label(6).Visible = True
    listdifferent.Visible = True
    label(8).Visible = False
    If (getvar("regression", "maxuser")) <> "" And Val(getvar("regression", "maxuser")) >= 0 And Val(getvar("regression",
"checkuservar")) <> 0 Then
        label(6).Caption = Val(getvar("regression", "maxuser")) + 1 & " regression variables"
    Else
        label(6).Caption = "0 regression variables"
    End If
Case False
    label(6).Visible = False
    listdifferent.Visible = False
    label(8).Visible = True
End Select
End Select
End Sub

```

## **1.1.16. XSliding.frm**

VERSION 2.00

Begin Form Sliding

```

BackColor = &H00C0C0C0&
BorderStyle = 0 'None
ClientHeight = 4215
ClientLeft = -75
ClientTop = 1830
ClientWidth = 9060
ControlBox = 0 'False
Height = 4620
HelpContextID = 13
Left = -135
LinkTopic = "Form2"
MaxButton = 0 'False
MinButton = 0 'False
ScaleHeight = 4215
ScaleWidth = 9060
Top = 1485
Width = 9180

```

Begin SSPanel Panel3DSliding

```

BackColor = &H00C0C0C0&
Font3D = 0 'None
Height = 4250
Index = 0
Left = 0
TabIndex = 1
Top = 0
Width = 9255

```

Begin ComboBox ComboSlidingFixmdl

```

Height = 300
HelpContextID = 1307
Left = 5040
Style = 2 'Dropdown List
TabIndex = 12
Top = 2400
Width = 3975

```

End

Begin ComboBox ComboSlidingOutlier

```

Height = 300
HelpContextID = 1306
Left = 5040
Style = 2 'Dropdown List
TabIndex = 34
Top = 1440
Width = 3975

```

End

Begin ComboBox ComboSlidingFixmissing

```

Height = 300
HelpContextID = 1308
Left = 5040
Style = 2 'Dropdown List
TabIndex = 22
Top = 480
Width = 3975

```

End

Begin SSFrame Frame3DSliding

```

Caption = "Threshold values:"
Font3D = 0 'None
ForeColor = &H00000000&
Height = 2175
Index = 0
Left = 240
TabIndex = 14
Top = 1440
Width = 4575

```

Begin TextBox TextSlidingCuttd

```

Height = 285
HelpContextID = 1305
Left = 3600
TabIndex = 20
Text = "2.0"

```

```

    Top      = 1680
    Width    = 735
End
Begin TextBox TextSlidingCutchn
    Height    = 285
    HelpContextID = 1304
    Left      = 3600
    TabIndex  = 19
    Text      = "3.0"
    Top      = 1080
    Width    = 735
End
Begin TextBox TextSlidingCutseas
    Height    = 285
    HelpContextID = 1303
    Left      = 3600
    TabIndex  = 18
    Text      = "3.0"
    Top      = 360
    Width    = 735
End
Begin Label Label
    BackStyle = 0 'Transparent
    Caption   = "For the trading day factors:"
    FontBold  = 0 'False
    FontItalic = 0 'False
    FontName  = "MS Sans Serif"
    FontSize  = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height    = 255
    Index     = 4
    Left      = 120
    TabIndex  = 17
    Top      = 1680
    Width     = 1995
End
Begin Label Label
    BackStyle = 0 'Transparent
    Caption   = "For the period-to-period or year-to-year percent changes in seasonally adjusted series:"
    FontBold  = 0 'False
    FontItalic = 0 'False
    FontName  = "MS Sans Serif"
    FontSize  = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height    = 435
    Index     = 3
    Left      = 120
    TabIndex  = 16
    Top      = 960
    Width     = 3375
End
Begin Label Label
    BackStyle = 0 'Transparent
    Caption   = "For the seasonal factors and seasonally adjusted series:"
    FontBold  = 0 'False
    FontItalic = 0 'False
    FontName  = "MS Sans Serif"
    FontSize  = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height    = 375
    Index     = 2
    Left      = 120
    TabIndex  = 15
    Top      = 360
    Width     = 3075
End
End
Begin SSCommand Command3DSliding
    BevelWidth = 1
    Caption    = "&Next"

```

```

Font3D      = 0 'None
FontBold    = 0 'False
FontItalic  = 0 'False
FontName    = "MS Sans Serif"
FontSize    = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height      = 375
HelpContextID = 13
Index       = 0
Left        = 7800
TabIndex    = 0
Top         = 3240
Width       = 1095
End
Begin TextBox TextSlidingLength
Height      = 285
HelpContextID = 1302
Left        = 4080
TabIndex    = 5
Top         = 840
Width       = 735
End
Begin TextBox TextSlidingStart
Height      = 285
HelpContextID = 1301
Left        = 3600
MaxLength   = 7
TabIndex    = 3
Top         = 240
Width       = 1215
End
Begin Label Label
BackStyle   = 0 'Transparent
Caption     = "Parameters estimation:"
FontBold    = 0 'False
FontItalic  = 0 'False
FontName    = "MS Sans Serif"
FontSize    = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height      = 195
Index       = 7
Left        = 5040
TabIndex    = 13
Top         = 2160
Width       = 1755
End
Begin Label Label
BackStyle   = 0 'Transparent
Caption     = "Outlier identification:"
FontBold    = 0 'False
FontItalic  = 0 'False
FontName    = "MS Sans Serif"
FontSize    = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height      = 195
Index       = 5
Left        = 5040
TabIndex    = 35
Top         = 1200
Width       = 1575
End
Begin Label Label
AutoSize    = -1 'True
BackStyle   = 0 'Transparent
Caption     = "1/2"
Height      = 195
Index       = 8
Left        = 8700
TabIndex    = 33
Top         = 120

```

```

Width      = 315
End
Begin Label Label
  BackStyle = 0 'Transparent
  Caption   = " For the dates use the format yyyy.mm (monthly) yyyy.q (quartly)."
```

FontBold = 0 'False

FontItalic = 0 'False

FontName = "MS Sans Serif"

FontSize = 8.25

FontStrikethru = 0 'False

FontUnderline = 0 'False

Height = 255

Index = 16

Left = 840

TabIndex = 30

Top = 3900

Width = 4575

```

End
Begin Label Label
  BackStyle = 0 'Transparent
  Caption   = "Note:"
  Height    = 255
  Index     = 15
  Left      = 360
  TabIndex  = 29
  Top       = 3900
  Width     = 495
End
Begin Label Label
  BackStyle = 0 'Transparent
  Caption   = "Replacement of missing values:"
  FontBold  = 0 'False
  FontItalic = 0 'False
  FontName  = "MS Sans Serif"
  FontSize  = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height    = 255
  Index     = 6
  Left      = 5040
  TabIndex  = 21
  Top       = 240
  Width     = 2355
End
Begin Label Label
  BackStyle = 0 'Transparent
  Caption   = "Length of the span of time series data:          (in months or quarters)"
  FontBold  = 0 'False
  FontItalic = 0 'False
  FontName  = "MS Sans Serif"
  FontSize  = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height    = 495
  Index     = 1
  Left      = 240
  TabIndex  = 4
  Top       = 720
  Width     = 2835
End
Begin Label Label
  BackStyle = 0 'Transparent
  Caption   = "Start date for sliding spans comparisons:"
  FontBold  = 0 'False
  FontItalic = 0 'False
  FontName  = "MS Sans Serif"
  FontSize  = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height    = 255
  Index     = 0
  Left      = 240
  TabIndex  = 2

```

```

    Top      = 240
    Width    = 2895
End
Begin SSPanel Panel3DSliding
    BackColor = &H00C0C0C0&
    Font3D    = 0 'None
    Height    = 4250
    Index     = 1
    Left      = 0
    TabIndex  = 10
    Top       = 0
    Width     = 9255
Begin SSCommand Command3DSliding
    BevelWidth = 1
    Caption    = "&Back"
    Font3D     = 0 'None
    FontBold   = 0 'False
    FontItalic = 0 'False
    FontName   = "MS Sans Serif"
    FontSize   = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height     = 375
    Index      = 2
    Left       = 7800
    TabIndex   = 31
    Top        = 3720
    Width      = 1095
End
Begin SSFrame Frame3DSliding
    Caption    = "Storage:"
    Font3D     = 0 'None
    ForeColor  = &H00000000&
    Height     = 3135
    Index      = 1
    Left       = 360
    TabIndex   = 23
    Top        = 360
    Width      = 5655
Begin SSCheck Check3DSlidingSave
    Caption    = "Indirect year-to-year changes from all sliding spans"
    Font3D     = 0 'None
    FontBold   = 0 'False
    FontItalic = 0 'False
    FontName   = "MS Sans Serif"
    FontSize   = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height     = 195
    HelpContextID = 1300
    Index      = 8
    Left       = 180
    TabIndex   = 6
    Top        = 2760
    Width      = 3915
End
Begin SSCheck Check3DSlidingSave
    Caption    = "Indirect seasonally adjusted series from all sliding spans"
    Font3D     = 0 'None
    FontBold   = 0 'False
    FontItalic = 0 'False
    FontName   = "MS Sans Serif"
    FontSize   = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height     = 195
    HelpContextID = 1300
    Index      = 7
    Left       = 180
    TabIndex   = 7
    Top        = 2460
    Width      = 4275

```

```

End
Begin SSCheck Check3DSlidingSave
  Caption      = "Indirect period-to-period changes from all sliding spans"
  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height       = 195
  HelpContextID = 1300
  Index        = 6
  Left         = 180
  TabIndex     = 8
  Top          = 2160
  Width        = 4155

```

```

End
Begin SSCheck Check3DSlidingSave
  Caption      = "Indirect seasonal factors from all sliding spans"
  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height       = 195
  HelpContextID = 1300
  Index        = 5
  Left         = 180
  TabIndex     = 9
  Top          = 1860
  Width        = 3615

```

```

End
Begin SSCheck Check3DSlidingSave
  Caption      = "Trading day factors form all sliding spans"
  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height       = 195
  HelpContextID = 1300
  Index        = 4
  Left         = 180
  TabIndex     = 28
  Top          = 1560
  Width        = 3195

```

```

End
Begin SSCheck Check3DSlidingSave
  Caption      = "Year-to-year changes form all sliding spans"
  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height       = 195
  HelpContextID = 1300
  Index        = 3
  Left         = 180
  TabIndex     = 27
  Top          = 1260
  Width        = 3375

```

```

End
Begin SSCheck Check3DSlidingSave
  Caption      = "Seasonally adjusted series from all sliding spans"
  Font3D       = 0 'None
  FontBold     = 0 'False

```



```

FontItalic   = 0 'False
FontName     = "MS Sans Serif"
FontSize     = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height       = 195
HelpContextID = 1300
Index        = 2
Left         = 180
TabIndex     = 26
Top          = 960
Width        = 3855
End
Begin SSCheck Check3DslidingSave
Caption      = "Period-to-period changes from all sliding spans"
Font3D       = 0 'None
FontBold     = 0 'False
FontItalic   = 0 'False
FontName     = "MS Sans Serif"
FontSize     = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height       = 195
HelpContextID = 1300
Index        = 1
Left         = 180
TabIndex     = 25
Top          = 660
Width        = 3615
End
Begin SSCheck Check3DslidingSave
Caption      = "Seasonal factors from all sliding spans"
Font3D       = 0 'None
FontBold     = 0 'False
FontItalic   = 0 'False
FontName     = "MS Sans Serif"
FontSize     = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height       = 195
HelpContextID = 1300
Index        = 0
Left         = 180
TabIndex     = 24
Top          = 360
Width        = 2955
End
End
Begin SSCommand Command3Dsliding
BevelWidth   = 1
Caption      = "&OK"
Font3D       = 0 'None
FontBold     = 0 'False
FontItalic   = 0 'False
FontName     = "MS Sans Serif"
FontSize     = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height       = 375
Index        = 1
Left         = 7800
TabIndex     = 11
Top          = 3240
Width        = 1095
End
Begin Label Label
AutoSize     = -1 'True
BackStyle    = 0 'Transparent
Caption      = "2/2"
Height       = 195
Index        = 19
Left         = 8700
TabIndex     = 32

```

```

    Top      = 120
    Width    = 315
End
End
Option Explicit

Sub cargar_sliding ()
Dim X%

TextSlidingStart.Text = (getvar("sliding", "start"))
TextSlidingLength = (getvar("sliding", "length"))
TextSlidingCutseas = (getvar("sliding", "cutseas"))
TextSlidingCutchnng = (getvar("sliding", "cutchnng"))
TextSlidingCuttd = (getvar("sliding", "cuttd"))
ComboSlidingFixmissing.ListIndex = Val(getvar("sliding", "fixmissing"))
For X% = 0 To 1
' Frame3DSliding(X%) = (getvar("sliding", "frame" & X%))
Next X%
ComboSlidingOutlier.ListIndex = Val(getvar("sliding", "outlier"))
ComboSlidingFixmdl.ListIndex = Val(getvar("sliding", "fixmdl"))
For X% = 0 To 8
    Check3DSlidingSave(X%) = Val(getvar("sliding", "save" & X%))
Next X%

End Sub

Sub command3dsliding_click (Index As Integer)
Dim X%, I1%, I2%, I3%

Select Case Index
Case 0
    panel3dsliding(1).ZOrder
Case 1
    'GUARDAR
    checkcargar(14) = "yes"
    Call setvar("sliding", "cargar", checkcargar(14))
    Call setvar("sliding", "start", TextSlidingStart)
    Call setvar("sliding", "length", TextSlidingLength)
    Call setvar("sliding", "cutseas", TextSlidingCutseas)
    Call setvar("sliding", "cutchnng", TextSlidingCutchnng)
    Call setvar("sliding", "cuttd", TextSlidingCuttd)
    I1% = ComboSlidingFixmissing.ListIndex
    Call setvar("sliding", "fixmissing", I1%)
    For X% = 0 To 1
        Call setvar("sliding", "frame" & X%, Frame3DSliding(X%))
    Next X%
    I2% = ComboSlidingOutlier.ListIndex
    Call setvar("sliding", "outlier", I2%)
    I3% = ComboSlidingFixmdl.ListIndex
    Call setvar("sliding", "fixmdl", I3%)
    For X% = 0 To 8
        Call setvar("sliding", "save" & X%, Check3DSlidingSave(X%))
    Next X%
Case 2 'back
    panel3dsliding(0).ZOrder
End Select

End Sub

Sub Form_Load ()

panel3dsliding(0).ZOrder

Call combo_sliding

If checkcargar(14) = "yes" Then
    Call cargar_sliding
Else
    Call inicializar_sliding
End If

Call command3dsliding_click(1)

```

```

End Sub

Sub TextSlidingCutchnng_KeyPress (keyascii As Integer)

keyascii = validar(keyascii)

End Sub

Sub TextSlidingCutseas_KeyPress (keyascii As Integer)

keyascii = validar(keyascii)

End Sub

Sub TextSlidingCuttd_KeyPress (keyascii As Integer)

keyascii = validar(keyascii)

End Sub

Sub TextSlidingLength_KeyPress (keyascii As Integer)

    keyascii = validar(keyascii)

End Sub

Sub TextSlidingStart_KeyPress (keyascii As Integer)

keyascii = validar(keyascii)

End Sub

Sub TextSlidingStart_LostFocus ()

    'If Val(TextSlidingStart.Text) < Val(start$) Then
    'mensaje de error
    'textslidingstart.SetFocus mirar!!!
    ' response% = MsgBox("Date not valid", 48, title$)
    'End If

End Sub

```

### 1.1.17. Xhistory.frm

VERSION 2.00

Begin Form history

```

BackColor = &H00C0C0C0&
BorderStyle = 0 'None
ClientHeight = 4215
ClientLeft = 105
ClientTop = 1980
ClientWidth = 9060
ControlBox = 0 'False
Height = 4620
HelpContextID = 7
Left = 45
LinkTopic = "Form1"
MaxButton = 0 'False
MinButton = 0 'False
ScaleHeight = 4215
ScaleWidth = 9060
Top = 1635
Width = 9180

```

Begin SSPanel Panel3DHistory

```

BackColor = &H00C0C0C0&
Font3D = 0 'None
Height = 4250
Index = 1
Left = 0
TabIndex = 15
Top = 0
Width = 9255

```

Begin SSCommand Command3DHistory

```

BevelWidth = 1
Caption = "&Back"
Font3D = 0 'None
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 375
Index = 5
Left = 7800
TabIndex = 70
Top = 3720
Width = 1095

```

End

Begin SSCheck Check3DHistory

```

Caption = "Restimate the regARIMA model during the revisions history analysis"
Font3D = 0 'None
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 255
HelpContextID = 707
Index = 0
Left = 660
TabIndex = 29
Top = 3480
Value = -1 'True
Width = 5115

```

End

Begin SSFrame Frame3Dhistory

```

Caption = "Forecasts leads that will be analyzed in the revisions"
Font3D = 0 'None
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False

```

```

FontUnderline = 0 'False
ForeColor     = &H00000000&
Height       = 1155
Index        = 1
Left         = 660
TabIndex     = 23
Top          = 2100
Width        = 4875
Begin TextBox TextHistoryFstep
    Height     = 315
    HelpContextID = 706
    Index      = 3
    Left       = 3720
    TabIndex   = 28
    Top        = 540
    Width      = 615
End
Begin TextBox TextHistoryFstep
    Height     = 315
    HelpContextID = 706
    Index      = 2
    Left       = 2580
    TabIndex   = 27
    Top        = 540
    Width      = 615
End
Begin TextBox TextHistoryFstep
    Height     = 315
    HelpContextID = 706
    Index      = 1
    Left       = 1380
    TabIndex   = 26
    Top        = 540
    Width      = 615
End
Begin TextBox TextHistoryFstep
    Height     = 315
    HelpContextID = 706
    Index      = 0
    Left       = 180
    TabIndex   = 25
    Top        = 540
    Width      = 615
End
Begin Label Label3
    BackStyle   = 0 'Transparent
    Caption     = "analysis of the forecasts:"
    FontBold    = 0 'False
    FontItalic  = 0 'False
    FontName    = "MS Sans Serif"
    FontSize    = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height     = 255
    Left       = 120
    TabIndex   = 24
    Top        = 240
    Width      = 2295
End
Begin TextBox TextHistoryRevisionlag
    Height     = 285
    HelpContextID = 705
    Left       = 3960
    TabIndex   = 21
    Top        = 1620
    Width      = 735
End
Begin TextBox TextHistoryEndtable
    Height     = 285
    HelpContextID = 704
    Left       = 3960
    TabIndex   = 19

```

```

Top      = 1080
Width    = 1215
End
Begin SSCommand Command3DHistory
  BevelWidth  = 1
  Caption     = "&Next"
  Font3D      = 0 'None
  FontBold    = 0 'False
  FontItalic  = 0 'False
  FontName    = "MS Sans Serif"
  FontSize    = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height     = 375
  Index      = 1
  Left       = 7800
  TabIndex   = 17
  Top        = 3240
  Width      = 1095
End
Begin ComboBox ComboHistoryType
  Height     = 300
  HelpContextID = 703
  Left       = 660
  Style      = 2 'Dropdown List
  TabIndex   = 16
  Top        = 480
  Width      = 4515
End
Begin Label Label
  AutoSize   = -1 'True
  BackStyle  = 0 'Transparent
  Caption    = "2/5"
  Height     = 195
  Index      = 17
  Left       = 8700
  TabIndex   = 78
  Top        = 120
  Width      = 315
End
Begin Label Label
  BackStyle  = 0 'Transparent
  Caption    = "For the dates use the format yyyy.mm (monthly) yyyy.q (quarterly)."
  FontBold   = 0 'False
  FontItalic = 0 'False
  FontName   = "MS Sans Serif"
  FontSize   = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height     = 255
  Index      = 16
  Left       = 1140
  TabIndex   = 66
  Top        = 3900
  Width      = 4575
End
Begin Label Label
  BackStyle  = 0 'Transparent
  Caption    = "Note:"
  Height     = 255
  Index      = 15
  Left       = 660
  TabIndex   = 67
  Top        = 3900
  Width      = 495
End
Begin Label Label2
  BackStyle  = 0 'Transparent
  Caption    = "Position of the observation analyzed relative to the concurrent estimate:"
  FontBold   = 0 'False
  FontItalic = 0 'False
  FontName   = "MS Sans Serif"
  FontSize   = 8.25

```

```

FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 435
Left = 660
TabIndex = 20
Top = 1560
Width = 2715
End
Begin Label Label
BackStyle = 0 'Transparent
Caption = "Final date of the output tables:"
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 195
Index = 2
Left = 660
TabIndex = 18
Top = 1080
Width = 2355
End
Begin Label Label1
BackStyle = 0 'Transparent
Caption = "Time points used in the history analysis:"
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 195
Left = 600
TabIndex = 2
Top = 240
Width = 2895
End
End
Begin SSPanel Panel3DHistory
BackColor = &H00C0C0C0&
Font3D = 0 'None
Height = 4250
Index = 0
Left = 0
TabIndex = 1
Top = 0
Width = 9255
Begin TextBox TextHistoryStart
Height = 285
HelpContextID = 701
Left = 3960
TabIndex = 14
Top = 300
Width = 1155
End
End
Begin SSCommand Command3DHistory
BevelWidth = 1
Caption = "&Next"
Font3D = 0 'None
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 375
HelpContextID = 7
Index = 0
Left = 7800
TabIndex = 0
Top = 3240

```

```

Width      = 1095
End
Begin SSFrame Frame3DHistory
Caption    = "Estimates analyzed:"
Font3D     = 0 'None
ForeColor  = &H00000000&
Height     = 3075
Index      = 0
Left       = 540
TabIndex   = 3
Top        = 720
Width      = 5715
Begin SSCheck Check3DHistoryEstimates
Caption    = "702"
Font3D     = 0 'None
FontBold   = 0 'False
FontItalic = 0 'False
FontName    = "MS Sans Serif"
FontSize    = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height     = 195
Index      = 7
Left       = 180
TabIndex   = 11
Top        = 2520
Width      = 195
End
Begin SSCheck Check3DHistoryEstimates
Caption    = "AIC's and maximum log likelihoods for the regARIMA model"
Font3D     = 0 'None
FontBold   = 0 'False
FontItalic = 0 'False
FontName    = "MS Sans Serif"
FontSize    = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height     = 195
HelpContextID = 702
Index      = 6
Left       = 180
TabIndex   = 10
Top        = 2160
Width      = 4575
End
Begin SSCheck Check3DHistoryEstimates
Caption    = "Period-to-period changes in the final Henderson trend component"
Font3D     = 0 'None
FontBold   = 0 'False
FontItalic = 0 'False
FontName    = "MS Sans Serif"
FontSize    = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height     = 195
HelpContextID = 702
Index      = 5
Left       = 180
TabIndex   = 9
Top        = 1860
Width      = 4995
End
Begin SSCheck Check3DHistoryEstimates
Caption    = "Final Henderson trend component"
Font3D     = 0 'None
FontBold   = 0 'False
FontItalic = 0 'False
FontName    = "MS Sans Serif"
FontSize    = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height     = 195
HelpContextID = 702

```



```

Index      = 4
Left       = 180
TabIndex   = 8
Top        = 1560
Width      = 2775
End
Begin SSCheck Check3DHistoryEstimates
Caption    = "Period-to-period changes in the final seasonally adjusted series"
Font3D     = 0 'None
FontBold   = 0 'False
FontItalic = 0 'False
FontName   = "MS Sans Serif"
FontSize   = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height     = 195
HelpContextID = 702
Index      = 3
Left       = 180
TabIndex   = 7
Top        = 1260
Width      = 4755
End
Begin SSCheck Check3DHistoryEstimates
Caption    = "Final seasonal factors, projected one year ahead"
Font3D     = 0 'None
FontBold   = 0 'False
FontItalic = 0 'False
FontName   = "MS Sans Serif"
FontSize   = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height     = 195
HelpContextID = 702
Index      = 2
Left       = 180
TabIndex   = 6
Top        = 960
Width      = 3795
End
Begin SSCheck Check3DHistoryEstimates
Caption    = "Final seasonal factors"
Font3D     = 0 'None
FontBold   = 0 'False
FontItalic = 0 'False
FontName   = "MS Sans Serif"
FontSize   = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height     = 195
HelpContextID = 702
Index      = 1
Left       = 180
TabIndex   = 5
Top        = 660
Width      = 1875
End
Begin SSCheck Check3DHistoryEstimates
Caption    = "Final seasonally adjusted series"
Font3D     = 0 'None
FontBold   = 0 'False
FontItalic = 0 'False
FontName   = "MS Sans Serif"
FontSize   = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height     = 195
HelpContextID = 702
Index      = 0
Left       = 180
TabIndex   = 4
Top        = 360
Value      = -1 'True

```

```

Width      = 2595
End
Begin Label Label
BackStyle  = 0 'Transparent
Caption    = "Forecasts and evolving mean square forecast errors generated from the regARIMA model"
FontBold   = 0 'False
FontItalic = 0 'False
FontName   = "MS Sans Serif"
FontSize   = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height     = 435
Index      = 0
Left       = 420
TabIndex   = 12
Top        = 2460
Width      = 4575
End
End
Begin Label Label
AutoSize   = -1 'True
BackStyle  = 0 'Transparent
Caption    = "1/5"
Height     = 195
Index      = 12
Left       = 8700
TabIndex   = 75
Top        = 120
Width      = 315
End
End
Begin Label Label
BackStyle  = 0 'Transparent
Caption    = " For the dates use the format yyyy.mm (monthly) yyyy.q (quarterly). "
FontBold   = 0 'False
FontItalic = 0 'False
FontName   = "MS Sans Serif"
FontSize   = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height     = 255
Index      = 10
Left       = 1020
TabIndex   = 68
Top        = 3900
Width      = 4575
End
End
Begin Label Label
BackStyle  = 0 'Transparent
Caption    = "Note:"
Height     = 255
Index      = 9
Left       = 540
TabIndex   = 69
Top        = 3900
Width      = 495
End
End
Begin Label Label
BackStyle  = 0 'Transparent
Caption    = "Starting date of the revisions history analysis:"
FontBold   = 0 'False
FontItalic = 0 'False
FontName   = "MS Sans Serif"
FontSize   = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height     = 255
Index      = 1
Left       = 540
TabIndex   = 13
Top        = 300
Width      = 3315
End
End
End

```

```

Begin SSPanel Panel3DHistory
  BackColor      = &H00C0C0C0&
  Font3D         = 0 'None
  Height        = 4250
  Index         = 4
  Left          = 0
  TabIndex      = 53
  Top           = 0
  Width         = 9255
Begin SSCommand Command3DHistory
  BevelWidth     = 1
  Caption       = "&Back"
  Font3D        = 0 'None
  FontBold      = 0 'False
  FontItalic    = 0 'False
  FontName      = "MS Sans Serif"
  FontSize      = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height       = 375
  Index       = 8
  Left        = 7800
  TabIndex    = 73
  Top         = 3720
  Width       = 1095
End
Begin SSFrame Frame3Dhistory
  Caption      = "Storage (continued):"
  Font3D       = 0 'None
  ForeColor    = &H00000000&
  Height      = 3375
  Index       = 3
  Left        = 300
  TabIndex    = 55
  Top         = 180
  Width       = 7215
Begin SSCheck Check3DHistorySave
  Caption      = "Concurrent and most recent estimate of the projected seasonal factors"
  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height      = 195
  HelpContextID = 700
  Index       = 15
  Left        = 180
  TabIndex    = 22
  Top         = 2940
  Width       = 5415
End
Begin SSCheck Check3DHistorySave
  Caption      = "Concurrent and most recent estimate of the period-to-period changes in the trend component"
  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height      = 195
  HelpContextID = 700
  Index       = 14
  Left        = 180
  TabIndex    = 61
  Top         = 2520
  Width       = 6795
End
Begin SSCheck Check3DHistorySave
  Caption      = "Concurrent and most recent estimate of the trend component"
  Font3D       = 0 'None

```

```

FontBold      = 0 'False
FontItalic    = 0 'False
FontName      = "MS Sans Serif"
FontSize      = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height        = 195
HelpContextID = 700
Index         = 13
Left          = 180
TabIndex      = 60
Top           = 2100
Width         = 4695
End
Begin SSCheck Check3DHistorySave
Caption       = "Concurrent and most recent estimate of the period-to-period"
Font3D        = 0 'None
FontBold      = 0 'False
FontItalic    = 0 'False
FontName      = "MS Sans Serif"
FontSize      = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height        = 195
HelpContextID = 700
Index         = 12
Left          = 180
TabIndex      = 59
Top           = 1680
Width         = 4575
End
Begin SSCheck Check3DHistorySave
Caption       = "Concurrent and most recent estimate of the seasonal factors"
Font3D        = 0 'None
FontBold      = 0 'False
FontItalic    = 0 'False
FontName      = "MS Sans Serif"
FontSize      = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height        = 195
HelpContextID = 700
Index         = 11
Left          = 180
TabIndex      = 58
Top           = 1260
Width         = 4635
End
Begin SSCheck Check3DHistorySave
Caption       = "Concurrent and most recent estimate of the seasonally adjusted data"
Font3D        = 0 'None
FontBold      = 0 'False
FontItalic    = 0 'False
FontName      = "MS Sans Serif"
FontSize      = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height        = 195
HelpContextID = 700
Index         = 10
Left          = 180
TabIndex      = 57
Top           = 840
Width         = 5415
End
Begin SSCheck Check3DHistorySave
Caption       = "Record of seasonal filter selection for each observation in the revisions history"
Font3D        = 0 'None
FontBold      = 0 'False
FontItalic    = 0 'False
FontName      = "MS Sans Serif"
FontSize      = 8.25
FontStrikethru = 0 'False

```

```

    FontUnderline = 0 'False
    Height       = 195
    HelpContextID = 700
    Index        = 9
    Left         = 180
    TabIndex     = 56
    Top          = 420
    Width        = 5955
End
End
Begin SSCommand Command3DHistory
    BevelWidth   = 1
    Caption      = "&OK"
    Font3D       = 0 'None
    FontBold     = 0 'False
    FontItalic   = 0 'False
    FontName     = "MS Sans Serif"
    FontSize     = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height       = 375
    Index        = 4
    Left         = 7800
    TabIndex     = 54
    Top          = 3240
    Width        = 1095
End
Begin Label Label
    AutoSize     = -1 'True
    BackStyle    = 0 'Transparent
    Caption      = "5/5"
    Height       = 195
    Index        = 11
    Left         = 8700
    TabIndex     = 74
    Top          = 120
    Width        = 315
End
End
Begin SSPanel Panel3DHistory
    BackColor    = &H00C0C0C0&
    Font3D       = 0 'None
    Height       = 4250
    Index        = 3
    Left         = 0
    TabIndex     = 38
    Top          = 0
    Width        = 9255
Begin SSCommand Command3DHistory
    BevelWidth   = 1
    Caption      = "&Back"
    Font3D       = 0 'None
    FontBold     = 0 'False
    FontItalic   = 0 'False
    FontName     = "MS Sans Serif"
    FontSize     = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height       = 375
    Index        = 7
    Left         = 7800
    TabIndex     = 72
    Top          = 3720
    Width        = 1095
End
Begin SSFrame Frame3DHistory
    Caption      = "Storage:"
    Font3D       = 0 'None
    ForeColor    = &H00000000&
    Height       = 3975
    Index        = 2
    Left         = 420
    TabIndex     = 40

```

```

Top      = 60
Width    = 6795
Begin SSCheck Check3DHistorySave
  Caption = "Revision from concurrent to most recent estimate of the projected seasonal factors"
  Font3D   = 0 'None'
  FontBold = 0 'False'
  FontItalic = 0 'False'
  FontName = "MS Sans Serif"
  FontSize = 8.25
  FontStrikethru = 0 'False'
  FontUnderline = 0 'False'
  Height   = 195
  HelpContextID = 700
  Index    = 8
  Left     = 240
  TabIndex = 49
  Top      = 3600
  Value    = -1 'True'
  Width    = 6255
End
Begin SSCheck Check3DHistorySave
  Font3D   = 0 'None'
  FontBold = 0 'False'
  FontItalic = 0 'False'
  FontName = "MS Sans Serif"
  FontSize = 8.25
  FontStrikethru = 0 'False'
  FontUnderline = 0 'False'
  Height   = 195
  HelpContextID = 700
  Index    = 7
  Left     = 240
  TabIndex = 48
  Top      = 3180
  Value    = -1 'True'
  Width    = 195
End
Begin SSCheck Check3DHistorySave
  Caption = "Evolving mean forecast errors for each observation in the revisions history"
  Font3D   = 0 'None'
  FontBold = 0 'False'
  FontItalic = 0 'False'
  FontName = "MS Sans Serif"
  FontSize = 8.25
  FontStrikethru = 0 'False'
  FontUnderline = 0 'False'
  Height   = 195
  HelpContextID = 700
  Index    = 6
  Left     = 240
  TabIndex = 47
  Top      = 2820
  Value    = -1 'True'
  Width    = 5595
End
Begin SSCheck Check3DHistorySave
  Caption = "Log-Likelihood and AIC Values for each observation in the revisions history"
  Font3D   = 0 'None'
  FontBold = 0 'False'
  FontItalic = 0 'False'
  FontName = "MS Sans Serif"
  FontSize = 8.25
  FontStrikethru = 0 'False'
  FontUnderline = 0 'False'
  Height   = 195
  HelpContextID = 700
  Index    = 5
  Left     = 240
  TabIndex = 46
  Top      = 2460
  Value    = -1 'True'
  Width    = 5715
End

```

```

Begin SSCheck Check3DHistorySave
  Caption      = "Revision from concurrent to most recent estimate of the trend-component"
  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height       = 195
  HelpContextID = 700
  Index        = 4
  Left         = 240
  TabIndex     = 45
  Top          = 2100
  Value        = -1 'True
  Width        = 5595

```

```
End
```

```
Begin SSCheck Check3DHistorySave
```

```

  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height       = 195
  HelpContextID = 700
  Index        = 3
  Left         = 240
  TabIndex     = 44
  Top          = 1560
  Value        = -1 'True
  Width        = 255

```

```
End
```

```
Begin SSCheck Check3DHistorySave
```

```

  Caption      = "Revision from concurrent to most recent estimate of the seasonal factors"
  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height       = 195
  HelpContextID = 700
  Index        = 2
  Left         = 240
  TabIndex     = 43
  Top          = 1200
  Value        = -1 'True
  Width        = 5415

```

```
End
```

```
Begin SSCheck Check3DHistorySave
```

```

  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height       = 195
  HelpContextID = 700
  Index        = 1
  Left         = 240
  TabIndex     = 42
  Top          = 720
  Value        = -1 'True
  Width        = 255

```

```
End
```

```
Begin SSCheck Check3DHistorySave
```

```

  Caption      = "Record for outliers removed and kept for the revisions history"
  Font3D       = 0 'None

```

```

FontBold      = 0 'False
FontItalic    = 0 'False
FontName      = "MS Sans Serif"
FontSize      = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height        = 195
HelpContextID = 700
Index         = 0
Left          = 240
TabIndex      = 41
Top           = 360
Value         = -1 'True
Width         = 4755
End
Begin Label Label
  BackStyle    = 0 'Transparent
  Caption      = "Revision from concurrent to most recent estimate of the period-to-period changes in the trend component"
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height       = 435
  Index        = 6
  Left         = 540
  TabIndex     = 52
  Top          = 3180
  Width        = 5355
End
Begin Label Label
  BackStyle    = 0 'Transparent
  Caption      = "Revision from concurrent to most recent estimate of the period-to-period changes in the seasonally
adjusted data"
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height       = 435
  Index        = 5
  Left         = 540
  TabIndex     = 51
  Top          = 1560
  Width        = 5235
End
Begin Label Label
  BackStyle    = 0 'Transparent
  Caption      = "Revision from concurrent to most recent estimate of the seasonally adjusted data"
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  Height       = 435
  Index        = 4
  Left         = 540
  TabIndex     = 50
  Top          = 720
  Width        = 4935
End
End
Begin SSCommand Command3DHistory
  BevelWidth   = 1
  Caption      = "&Next"
  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize     = 8.25

```



```

FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 375
Index = 3
Left = 7800
TabIndex = 39
Top = 3240
Width = 1095
End
Begin Label Label
  AutoSize = -1 'True
  BackStyle = 0 'Transparent
  Caption = "4/5"
  Height = 195
  Index = 13
  Left = 8700
  TabIndex = 76
  Top = 120
  Width = 315
End
Begin SSPanel Panel3DHistory
  BackColor = &H00C0C0C0&
  Font3D = 0 'None
  Height = 4250
  Index = 2
  Left = 0
  TabIndex = 30
  Top = 0
  Width = 9255
  Begin SSCommand Command3DHistory
    BevelWidth = 1
    Caption = "&Back"
    Font3D = 0 'None
    FontBold = 0 'False
    FontItalic = 0 'False
    FontName = "MS Sans Serif"
    FontSize = 8.25
    FontStrikethru = 0 'False
    FontUnderline = 0 'False
    Height = 375
    Index = 6
    Left = 7800
    TabIndex = 71
    Top = 3720
    Width = 1095
  End
End
Begin ComboBox ComboHistoryAdjfst
  Height = 300
  HelpContextID = 709
  Left = 600
  Style = 2 'Dropdown List
  TabIndex = 65
  Top = 1200
  Width = 5295
End
Begin ComboBox ComboHistoryRefresh
  Height = 300
  HelpContextID = 708
  Left = 600
  Style = 2 'Dropdown List
  TabIndex = 63
  Top = 420
  Width = 5295
End
Begin SSCheck Check3DHistory
  Caption = "Values of missing observations will be recalculated each time model estimation"
  Font3D = 0 'None
  FontBold = 0 'False
  FontItalic = 0 'False
  FontName = "MS Sans Serif"
  FontSize = 8.25
  FontStrikethru = 0 'False

```

```

FontUnderline = 0 'False
Height        = 195
HelpContextID = 713
Index         = 2
Left          = 600
TabIndex      = 37
Top           = 3720
Width         = 5895
End
Begin SSCheck Check3DHistory
Caption       = "Remove all level shift and ramp outlier effects"
Font3D        = 0 'None
FontBold      = 0 'False
FontItalic    = 0 'False
FontName      = "MS Sans Serif"
FontSize      = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height        = 195
HelpContextID = 712
Index         = 1
Left          = 600
TabIndex      = 36
Top           = 3240
Value         = -1 'True
Width         = 3735
End
Begin TextBox TextHistoryOutlierwin
Height        = 285
HelpContextID = 711
Left          = 4800
TabIndex      = 35
Top           = 2700
Width         = 675
End
Begin ComboBox ComboHistoryOutlier
Height        = 300
HelpContextID = 710
Left          = 600
Style         = 2 'Dropdown List
TabIndex      = 32
Top           = 2040
Width         = 5295
End
Begin SSCommand Command3DHistory
BevelWidth    = 1
Caption       = "&Next"
Font3D        = 0 'None
FontBold      = 0 'False
FontItalic    = 0 'False
FontName      = "MS Sans Serif"
FontSize      = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height        = 375
Index         = 2
Left          = 7800
TabIndex      = 31
Top           = 3240
Width         = 1095
End
Begin Label Label
AutoSize      = -1 'True
BackStyle     = 0 'Transparent
Caption       = "3/5"
Height        = 195
Index         = 14
Left          = 8700
TabIndex      = 77
Top           = 120
Width         = 315
End
Begin Label Label

```

```

BackStyle = 0 'Transparent
Caption = "Prior adjustments and forecasts:"
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 255
Index = 8
Left = 600
TabIndex = 64
Top = 960
Width = 2355
End
Begin Label Label
BackStyle = 0 'Transparent
Caption = "Initial values used for parameter estimation:"
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 255
Index = 7
Left = 600
TabIndex = 62
Top = 180
Width = 3195
End
Begin Label Label
BackStyle = 0 'Transparent
Caption = "Number of observations used for outlier identification:"
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 255
Index = 3
Left = 600
TabIndex = 34
Top = 2700
Width = 3735
End
Begin Label Label4
BackStyle = 0 'Transparent
Caption = "Outlier detection in the revisions history analysis:"
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
Height = 255
Left = 600
TabIndex = 33
Top = 1800
Width = 3495
End
End
Option Explicit

Sub cargar_history ()
Dim X%

texthistorystart.Text = (getvar("history", "start"))
For X% = 0 To 7
    check3dhistoryestimates(X%) = Val(getvar("history", "checkestimates" & X%))
Next X%

```

```

'For X% = 0 To 2
'  frame3dhistory(X%) = (getvar("history", "frameestimates" & X%))
'Next X%
combohistrytype.ListIndex = Val(getvar("history", "combotype"))
texthistoryendtable = (getvar("history", "endtable"))
texthistoryrevisionlag.Text = (getvar("history", "revisionlag"))
For X% = 0 To 3
  texthistoryfstep(X%) = (getvar("history", "fstep" & X%))
Next X%
For X% = 0 To 2
  check3dhistory(X%) = Val(getvar("history", "checkhistory" & X%))
Next X%
For X% = 0 To 15
  check3dhistorysave(X%) = Val(getvar("history", "save" & X%))
Next X%
combohistryoutlier.ListIndex = Val(getvar("history", "outlier"))
combohistryrefresh.ListIndex = Val(getvar("history", "refresh"))
combohistryadjfcst.ListIndex = Val(getvar("history", "adjfcst"))
texthistoryoutlierwin.Text = (getvar("history", "outlierwin"))

End Sub

Sub command3dhistory_click (Index As Integer)
Dim X%, I1%, I2%, I3%, I4%

Select Case Index
Case 0
  panel3dhistory(1).ZOrder
Case 1
  panel3dhistory(2).ZOrder
Case 2
  panel3dhistory(3).ZOrder
Case 3
  panel3dhistory(4).ZOrder
Case 4
  'GUARDAR
  checkcargar(15) = "yes"
  Call setvar("history", "cargar", checkcargar(15))
  Call setvar("history", "start", texthistorystart)
  For X% = 0 To 7
    Call setvar("history", "checkestimates" & X%, check3dhistoryestimates(X%))
  Next X%
  For X% = 0 To 2
    Call setvar("history", "frameestimates" & X%, frame3dhistory(X%))
  Next X%
  I1% = combohistrytype.ListIndex
  Call setvar("history", "combotype", I1%)
  Call setvar("history", "endtable", texthistoryendtable)
  Call setvar("history", "revisionlag", texthistoryrevisionlag)
  For X% = 0 To 3
    Call setvar("history", "fstep" & X%, texthistoryfstep(X%))
  Next X%
  For X% = 0 To 2
    Call setvar("history", "checkhistory" & X%, check3dhistory(X%))
  Next X%
  For X% = 0 To 15
    Call setvar("history", "save" & X%, check3dhistorysave(X%))
  Next X%
  I2% = combohistryoutlier.ListIndex
  Call setvar("history", "outlier", I2%)
  I3% = combohistryrefresh.ListIndex
  Call setvar("history", "refresh", I3%)
  I4% = combohistryadjfcst.ListIndex
  Call setvar("history", "adjfcst", I4%)
  Call setvar("history", "outlierwin", texthistoryoutlierwin)
Case 5 'back segundo panel
  panel3dhistory(0).ZOrder
Case 6 'back tercer panel
  panel3dhistory(1).ZOrder
Case 7 'back cuarto panel
  panel3dhistory(2).ZOrder
Case 8 'back quinto panel
  panel3dhistory(3).ZOrder

```

```

    End Select
End Sub

Sub Form_Load ()

    panel3dhistory(0).ZOrder

    Call combo_history

    'If checkcargar(15) = "yes" Then
        Call cargar_history
    ' Else Call inicializar_history
    'End If

    Call command3dhistory_click(4)

End Sub

Sub Label_Click (Index As Integer) 'n

    Select Case Index
    Case 0
        check3dhistoryestimates(7).Value = Not (check3dhistoryestimates(7).Value)
    Case 4
        check3dhistorysave(1).Value = Not (check3dhistorysave(1).Value)
    Case 5
        check3dhistorysave(3).Value = Not (check3dhistorysave(3).Value)
    Case 6
        check3dhistorysave(7).Value = Not (check3dhistorysave(7).Value)
    End Select

End Sub

Sub TextHistoryEndtable_KeyPress (keyascii As Integer)

    keyascii = validar(keyascii)

End Sub

Sub TextHistoryFstep_KeyPress (Index As Integer, keyascii As Integer)

    keyascii = validar(keyascii)

End Sub

Sub TextHistoryOutlierwin_KeyPress (keyascii As Integer)

    keyascii = validar(keyascii)

End Sub

Sub TextHistoryRevisionlag_KeyPress (keyascii As Integer)

    keyascii = validar(keyascii)

End Sub

Sub TextHistoryStart_KeyPress (keyascii As Integer)

    keyascii = validar(keyascii)

End Sub

```

## 1.1.18. Tables.frm

VERSION 2.00

Begin Form Tables

```
BackColor = &H00C0C0C0&
ClientHeight = 5445
ClientLeft = 90
ClientTop = 1395
ClientWidth = 9450
Height = 5850
Left = 30
LinkTopic = "Form1"
ScaleHeight = 5445
ScaleWidth = 9450
Top = 1050
Width = 9570
```

Begin SSPanel Panel3DTables

```
BackColor = &H00C0C0C0&
Font3D = 2 'Raised w/heavy shading
ForeColor = &H00000000&
Height = 5475
Index = 0
Left = 0
TabIndex = 0
Top = 0
Width = 9435
```

Begin ListBox ListSeries

```
Height = 1200
Left = 480
TabIndex = 28
Top = 840
Width = 2175
```

End

Begin SSCommand Command3DGraph

```
BevelWidth = 1
Caption = "Original series"
Font3D = 0 'None
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
ForeColor = &H00000000&
Height = 375
Index = 0
Left = 2880
TabIndex = 27
Top = 240
Width = 2055
```

End

Begin SSCommand Command3DGraph

```
BevelWidth = 1
Caption = "Transformed series"
Font3D = 0 'None
FontBold = 0 'False
FontItalic = 0 'False
FontName = "MS Sans Serif"
FontSize = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
ForeColor = &H00000000&
Height = 375
Index = 1
Left = 2880
TabIndex = 26
Top = 600
Width = 2055
```

End

Begin SSCommand Command3DGraph

```
BevelWidth = 1
Caption = "Seasonally adjusted series"
Font3D = 0 'None
```

```

FontBold    = 0 'False
FontItalic  = 0 'False
FontName    = "MS Sans Serif"
FontSize    = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
ForeColor   = &H00000000&
Height      = 375
Index       = 3
Left        = 2880
TabIndex    = 25
Top         = 1320
Width       = 2055
End
Begin SSCommand Command3DGraph
  BevelWidth = 1
  Caption    = "Trend-cycle"
  Font3D     = 0 'None
  FontBold   = 0 'False
  FontItalic = 0 'False
  FontName   = "MS Sans Serif"
  FontSize   = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  ForeColor  = &H00000000&
  Height     = 375
  Index      = 4
  Left       = 2880
  TabIndex   = 24
  Top        = 1680
  Width      = 2055
End
Begin SSCommand Command3DGraph
  BevelWidth = 1
  Caption    = "Irregular component"
  Font3D     = 0 'None
  FontBold   = 0 'False
  FontItalic = 0 'False
  FontName   = "MS Sans Serif"
  FontSize   = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  ForeColor  = &H00000000&
  Height     = 375
  Index      = 5
  Left       = 4920
  TabIndex   = 23
  Top        = 240
  Width      = 2055
End
Begin SSCommand Command3DGraph
  BevelWidth = 1
  Caption    = "Seasonal factors"
  Font3D     = 0 'None
  FontBold   = 0 'False
  FontItalic = 0 'False
  FontName   = "MS Sans Serif"
  FontSize   = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  ForeColor  = &H00000000&
  Height     = 375
  Index      = 6
  Left       = 4920
  TabIndex   = 22
  Top        = 600
  Width      = 2055
End
Begin SSCommand Command3DGraph
  BevelWidth = 1
  Caption    = "Trading day"
  Font3D     = 0 'None
  FontBold   = 0 'False

```

```

FontItalic   = 0 'False
FontName     = "MS Sans Serif"
FontSize     = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
ForeColor    = &H00000000&
Height       = 375
Index        = 7
Left         = 4920
TabIndex     = 21
Top          = 960
Width        = 2055
End
Begin SSCommand Command3DGraph
  BevelWidth  = 1
  Caption     = "Si-ratios (differences)"
  Font3D      = 0 'None
  FontBold    = 0 'False
  FontItalic  = 0 'False
  FontName    = "MS Sans Serif"
  FontSize    = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  ForeColor   = &H00000000&
  Height      = 375
  Index       = 9
  Left        = 4920
  TabIndex    = 20
  Top         = 1680
  Width       = 2055
End
Begin SSCommand Command3DGraph
  BevelWidth  = 1
  Caption     = "Outliers"
  Font3D      = 0 'None
  FontBold    = 0 'False
  FontItalic  = 0 'False
  FontName    = "MS Sans Serif"
  FontSize    = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  ForeColor   = &H00000000&
  Height      = 375
  Index       = 10
  Left        = 6960
  TabIndex    = 19
  Top         = 240
  Width       = 2055
End
Begin SSCommand Command3DGraph
  BevelWidth  = 1
  Caption     = "Forecasts"
  Font3D      = 0 'None
  FontBold    = 0 'False
  FontItalic  = 0 'False
  FontName    = "MS Sans Serif"
  FontSize    = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  ForeColor   = &H00000000&
  Height      = 375
  Index       = 11
  Left        = 6960
  TabIndex    = 18
  Top         = 600
  Width       = 2055
End
Begin SSCommand Command3DGraph
  BevelWidth  = 1
  Caption     = "ACF/PACF, Residuals"
  Font3D      = 0 'None
  FontBold    = 0 'False
  FontItalic  = 0 'False

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FontName      = "MS Sans Serif"
FontSize      = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
ForeColor     = &H00000000&
Height       = 375
Index        = 2
Left         = 2880
TabIndex     = 17
Top          = 960
Width        = 2055
End
Begin SSCommand Command3DGraph
  BevelWidth   = 1
  Caption      = "Holiday factors"
  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize    = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  ForeColor    = &H00000000&
  Height      = 375
  Index       = 8
  Left        = 4920
  TabIndex    = 16
  Top         = 1320
  Width       = 2055
End
Begin SSCommand Command3DGraph
  BevelWidth   = 1
  Caption      = "Slidingspans"
  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize    = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  ForeColor    = &H00000000&
  Height      = 375
  Index       = 12
  Left        = 6960
  TabIndex    = 15
  Top         = 960
  Width       = 2055
End
Begin SSCommand Command3DGraph
  BevelWidth   = 1
  Caption      = "History"
  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False
  FontName     = "MS Sans Serif"
  FontSize    = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  ForeColor    = &H00000000&
  Height      = 375
  Index       = 13
  Left        = 6960
  TabIndex    = 14
  Top         = 1320
  Width       = 2055
End
Begin SSCommand Command3DGraph
  BevelWidth   = 1
  Caption      = "Composite"
  Enabled      = 0 'False
  Font3D       = 0 'None
  FontBold     = 0 'False
  FontItalic   = 0 'False

```

```

FontName    = "MS Sans Serif"
FontSize    = 8.25
FontStrikethru = 0 'False
FontUnderline = 0 'False
ForeColor    = &H00000000&
Height      = 375
Index       = 14
Left        = 6960
TabIndex    = 13
Top         = 1680
Width       = 2055
End
Begin SSCommand Command3DClearList
  BevelWidth = 1
  Caption    = "&Clear list"
  Font3D     = 0 'None
  FontBold   = 0 'False
  FontItalic = 0 'False
  FontName   = "MS Sans Serif"
  FontSize   = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  ForeColor  = &H00000000&
  Height     = 375
  Left       = 540
  TabIndex   = 11
  Top        = 4920
  Width      = 1095
End
Begin ListBox ListGraph
  Height = 2175
  Left   = 180
  MultiSelect = 1 'Simple
  TabIndex = 10
  Top      = 2400
  Width    = 6075
End
Begin SSCommand Command3DReturn
  BevelWidth = 1
  Caption    = "&Exit"
  Font3D     = 0 'None
  FontBold   = 0 'False
  FontItalic = 0 'False
  FontName   = "MS Sans Serif"
  FontSize   = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  ForeColor  = &H00000000&
  Height     = 375
  Left       = 8040
  TabIndex   = 8
  Top        = 4920
  Width      = 1095
End
Begin CommonDialog CMDialog1
  Filter = "Todos los archivos (*.*)|*.*"
  Left   = 8760
  Top    = 0
End
Begin SSCommand Command3DSameGraph
  BevelWidth = 1
  Caption    = "&Graph"
  Font3D     = 0 'None
  FontBold   = 0 'False
  FontItalic = 0 'False
  FontName   = "MS Sans Serif"
  FontSize   = 8.25
  FontStrikethru = 0 'False
  FontUnderline = 0 'False
  ForeColor  = &H00000000&
  Height     = 375
  Left       = 2400
  TabIndex   = 7

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```

    Top      = 4920
    Width    = 1095
End
Begin Label Label
    BackStyle = 0 'Transparent
    Caption   = "Series:"
    Height    = 255
    Index     = 0
    Left      = 480
    TabIndex  = 12
    Top       = 180
    Width     = 615
End
Begin Label LabelSeries
    BorderStyle = 1 'Fixed Single
    Height      = 285
    Left        = 480
    TabIndex    = 29
    Top         = 420
    Width       = 2175
End
Begin Label Label
    AutoSize   = -1 'True
    BackStyle  = 0 'Transparent
    Caption    = "Graphics:"
    Height     = 195
    Index      = 1
    Left       = 180
    TabIndex   = 9
    Top        = 2160
    Width      = 825
End
End
Begin SSPanel Panel3DTables
    Font3D      = 2 'Raised w/heavy shading
    ForeColor   = &H00000000&
    Height      = 5475
    Index       = 6
    Left        = 0
    TabIndex    = 6
    Top         = 0
    Width       = 9435
End
Begin SSPanel Panel3DTables
    Font3D      = 2 'Raised w/heavy shading
    ForeColor   = &H00000000&
    Height      = 5475
    Index       = 5
    Left        = 0
    TabIndex    = 5
    Top         = 0
    Width       = 9435
End
Begin SSPanel Panel3DTables
    Font3D      = 2 'Raised w/heavy shading
    ForeColor   = &H00000000&
    Height      = 5475
    Index       = 4
    Left        = 0
    TabIndex    = 4
    Top         = 0
    Width       = 9435
End
Begin SSPanel Panel3DTables
    Font3D      = 2 'Raised w/heavy shading
    ForeColor   = &H00000000&
    Height      = 5475
    Index       = 3
    Left        = 0
    TabIndex    = 3
    Top         = 0
    Width       = 9435
End
End

```

```
Begin SSPanel Panel3DTables
Font3D      = 2 'Raised w/heavy shading
ForeColor   = &H00000000&
Height      = 5475
Index       = 2
Left        = 0
TabIndex    = 2
Top         = 0
Width       = 9435
End
Begin SSPanel Panel3DTables
Font3D      = 2 'Raised w/heavy shading
ForeColor   = &H00000000&
Height      = 5475
Index       = 1
Left        = 0
TabIndex    = 1
Top         = 0
Width       = 9435
End
End
Option Explicit

Sub Command3DClearList_Click ()
Dim x%

listgraph.Clear
End Sub

Sub Command3DGraph_Click (Index As Integer)

mousepointer = 11
Select Case Index
Case 0 'original series
If Val(getvar("formx12", "arguments0")) <> 0 Then
If Val(getvar("series", "save0")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".A1") <> "" Then
listgraph.AddItem "Time series"
End If
End If
End If
If Val(getvar("formx12", "arguments0")) <> 0 Then
If Val(getvar("series", "save1")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".MVA") <> "" Then
listgraph.AddItem "Time series with missing values replaced"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx112")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B1") <> "" Then
listgraph.AddItem "Original series, adjusted for prior effects and forecast extended"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx117")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".E4") <> "" Then
listgraph.AddItem "Ratio of yearly totals for original, seasonally adjusted series"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx118")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".E5") <> "" Then
listgraph.AddItem "Percent changes in original series"
End If
End If
End If
```

```

End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1135")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".B19") <> "" Then
listgraph.AddItem "Original series adjusted for preliminary trading day"
End If

End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1137")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".C1") <> "" Then
listgraph.AddItem "Original series modified for outliers, td and prior factors, C iteration"
End If

End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1147")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".C19") <> "" Then
listgraph.AddItem "Original series adjusted for final trading day"
End If

End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1149")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".D1") <> "" Then
listgraph.AddItem "Original series modified for outliers, td and prior factors, D iteration"
End If

End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1157")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".E1") <> "" Then
listgraph.AddItem "Original series modified for extreme values"
End If

End If
End If
If Val(getvar("formx12", "arguments12")) <> 0 Then
If Val(getvar("regadjust", "save5")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".A11") <> "" Then
listgraph.AddItem "Original series adjusted for regARIMA outliers"
End If

End If
End If
Case 1 'transformed series
If Val(getvar("formx12", "arguments2")) <> 0 Then
If Val(getvar("transform", "save0")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".A2") <> "" Then
listgraph.AddItem "Prior adjustment factors"
End If

End If
End If
If Val(getvar("formx12", "arguments2")) <> 0 Then
If Val(getvar("transform", "save1")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".A3") <> "" Then
listgraph.AddItem "Prior adjusted series"
End If

End If
End If
If Val(getvar("formx12", "arguments2")) <> 0 Then
If Val(getvar("transform", "save2")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".TRN") <> "" Then
listgraph.AddItem "Prior adjusted and transformed series"
datagraph$ = app.path & "output\" & seriesgraph & ".TRN"
End If

End If
End If
End If
If Val(getvar("formx12", "arguments2")) <> 0 Then
If Val(getvar("transform", "save3")) <> 0 Then

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If Dir$(app.Path & "\output\" & seriesgraph & ".A10") <> "" Then
    listgraph.AddItem "Henderson trend of prior adjusted series"
    'datagraph$ = app.path & "\output\" & seriesgraph & ".A10"
End If
End If
End If
If Val(getvar("formx12", "arguments12")) <> 0 Then
If Val(getvar("regadjust", "save4")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".USR") <> "" Then
        listgraph.AddItem "Factors from user-defined regression variables"
    End If
End If
End If
Case 2 'ACF/PACF, residuals
If Val(getvar("formx12", "arguments10")) <> 0 Then
If Val(getvar("check", "save0")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".ACF") <> "" Then
        listgraph.AddItem "ACF"
        'datagraph$ = app.path & "\output\" & seriesgraph & ".ACF"
    End If
End If
End If
If Val(getvar("formx12", "arguments10")) <> 0 Then
If Val(getvar("check", "save1")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".PCF") <> "" Then
        listgraph.AddItem "PACF"
        'datagraph$ = app.path & "\output\" & seriesgraph & ".PCF"
    End If
End If
End If
If Val(getvar("formx12", "arguments8")) <> 0 Then
If Val(getvar("estimate", "checkestimate0")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".RSD") <> "" Then
        listgraph.AddItem "Residuals"
        'datagraph$ = app.path & "\output\" & seriesgraph & ".RSD"
    End If
End If
End If
End If
Case 3 'Seasonally adjusted series
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1110")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".D11") <> "" Then
        listgraph.AddItem "Final seasonally adjusted series"
        'datagraph$ = app.path & "\output\" & seriesgraph & ".D11"
    End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1111")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".SAA") <> "" Then
        listgraph.AddItem "Final seasonally adjusted series with constrained yearly totals"
        'datagraph$ = app.path & "\output\" & seriesgraph & ".SAA"
    End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1112")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".RND") <> "" Then
        listgraph.AddItem "Rounded final seasonally adjusted series"
        'datagraph$ = app.path & "\output\" & seriesgraph & ".RND"
    End If
End If
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1116")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".FAD") <> "" Then
        listgraph.AddItem "Final adjustment difference"
        'datagraph$ = app.path & "\output\" & seriesgraph & ".RND"
    End If
End If
End If
End If

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End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1117")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".E4") <> "" Then
listgraph.AddItem "Ratio of yearly totals for original, seasonally adjusted series"
'datagraph$ = app.path & "\output\" & seriesgraph & ".RND"
End If

End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1119")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".E6") <> "" Then
listgraph.AddItem "Percent changes in seasonally adjusted series"
'datagraph$ = app.path & "\output\" & seriesgraph & ".E6"
End If

End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1120")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".E6A") <> "" Then
listgraph.AddItem "Percent changes in seasonally adjusted series with revised yearly totals"
'datagraph$ = app.path & "\output\" & seriesgraph & ".E6A"
End If

End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1121")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".E6R") <> "" Then
listgraph.AddItem "Percent changes in rounded seasonally adjusted series"
'datagraph$ = app.path & "\output\" & seriesgraph & ".E6R"
End If

End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1126")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B6") <> "" Then
listgraph.AddItem "Preliminary seasonally adjusted series, B iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".B6"
End If

End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1130")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B11") <> "" Then
listgraph.AddItem "Seasonally adjusted series, B iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".B11"
End If

End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1141")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".C6") <> "" Then
listgraph.AddItem "Preliminary seasonally adjusted series, C iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".C6"
End If

End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1145")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".C11") <> "" Then
listgraph.AddItem "Seasonally adjusted series, C iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".C11"
End If

End If
End If
End If

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If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1153")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".D6") <> "" Then
listgraph.AddItem "Preliminary seasonally adjusted series, D iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".D6"
End If

End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1158")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".E2") <> "" Then
listgraph.AddItem "Seasonally adjusted series modified for extreme values"
'datagraph$ = app.path & "\output\" & seriesgraph & ".E2"
End If

End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1160")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".E11") <> "" Then
listgraph.AddItem "Robust final seasonally adjusted series"
'datagraph$ = app.path & "\output\" & seriesgraph & ".E11"
End If

End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1161")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".F1") <> "" Then
listgraph.AddItem "MCD moving average of the final seasonally adjusted series"
'datagraph$ = app.path & "\output\" & seriesgraph & ".F1"
End If

End If
End If
End If
Case 4 'trend cycle
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1113")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".D12") <> "" Then
listgraph.AddItem "Final trend-cycle"
'datagraph$ = app.path & "\output\" & seriesgraph & ".D12"
End If

End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1122")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".E7") <> "" Then
listgraph.AddItem "Final trend-cycle using original series modified for extreme values"
'datagraph$ = app.path & "\output\" & seriesgraph & ".E7"
End If

End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1123")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B2") <> "" Then
listgraph.AddItem "Preliminary trend-cycle, B iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".B2"
End If

End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1127")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B7") <> "" Then
listgraph.AddItem "Preliminary trend-cycle, B iteration ??"
'datagraph$ = app.path & "\output\" & seriesgraph & ".B7"
End If

End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1138")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".C2") <> "" Then
listgraph.AddItem "Preliminary trend-cycle, C iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".C2"

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End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1142")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".C7") <> "" Then
listgraph.AddItem "Preliminary trend-cycle, C iteration ??"
'datagraph$ = app.path & "\output\" & seriesgraph & ".C7"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1150")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".D2") <> "" Then
listgraph.AddItem "Preliminary trend-cycle, D iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".D2"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1154")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".D7") <> "" Then
listgraph.AddItem "Preliminary trend-cycle, D iteration ??"
'datagraph$ = app.path & "\output\" & seriesgraph & ".D7"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1155")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".TAL") <> "" Then
listgraph.AddItem "Final trend-cycle adjusted for LS"
'datagraph$ = app.path & "\output\" & seriesgraph & ".TAL"
End If
End If
End If
Case 5 'irregular component
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx114")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".C17") <> "" Then
listgraph.AddItem "Final weights for the irregular component"
'datagraph$ = app.path & "\output\" & seriesgraph & ".C17"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1114")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".D13") <> "" Then
listgraph.AddItem "Final irregular component"
'datagraph$ = app.path & "\output\" & seriesgraph & ".D13"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1131")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B13") <> "" Then
listgraph.AddItem "Irregular component, B iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".B13"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1133")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B17") <> "" Then
listgraph.AddItem "Preliminary weights for the irregular component"
'datagraph$ = app.path & "\output\" & seriesgraph & ".B17"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1146")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".C13") <> "" Then
listgraph.AddItem "Irregular component, C iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".C13"

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End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1156")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".IAO") <> "" Then
listgraph.AddItem "Final irregular component adjusted for AO"
'datagraph$ = app.path & "\output\" & seriesgraph & ".IAO"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1159")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".E3") <> "" Then
listgraph.AddItem "Irregular component modified for extreme values"
'datagraph$ = app.path & "\output\" & seriesgraph & ".E3"
End If
End If
End If
Case 6 'seasonal component
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx118")) <> 0 = True Then
If Dir$(app.Path & "\output\" & seriesgraph & ".D10") <> "" Then
listgraph.AddItem "Final seasonal factors"
'datagraph$ = app.path & "\output\" & seriesgraph & ".D10"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx119")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".FSD") <> "" Then
listgraph.AddItem "Final seasonal difference"
'datagraph$ = app.path & "\output\" & seriesgraph & ".FSD"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1115")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".D16") <> "" Then
listgraph.AddItem "Combined seasonal and trading day factors"
'datagraph$ = app.path & "\output\" & seriesgraph & ".D16"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1125")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B5") <> "" Then
listgraph.AddItem "Preliminary seasonal factors, B iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".B5"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1129")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B10") <> "" Then
listgraph.AddItem "Seasonal factors, B iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".B10"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1140")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".C5") <> "" Then
listgraph.AddItem "Preliminary seasonal factors, C iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".C5"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1152")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".D5") <> "" Then
listgraph.AddItem "Preliminary seasonal factors, D iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".D5"

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End If
End If
End If
Case 7 'trading day
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx111")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".A4") <> "" Then
listgraph.AddItem "Prior trading day factors and weights"
'datagraph$ = app.path & "\output\" & seriesgraph & ".A4"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx113")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".C16") <> "" Then
listgraph.AddItem "Final trading day factors and weights"
'datagraph$ = app.path & "\output\" & seriesgraph & ".C16"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx115")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".C18") <> "" Then
listgraph.AddItem "Final trading day from combined daily weights"
'datagraph$ = app.path & "\output\" & seriesgraph & ".C18"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx115")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".D16") <> "" Then
listgraph.AddItem "Combined seasonal and trading day factors"
'datagraph$ = app.path & "\output\" & seriesgraph & ".D16"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1132")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B16") <> "" Then
listgraph.AddItem "Preliminary trading day factors and weights"
'datagraph$ = app.path & "\output\" & seriesgraph & ".B16"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1134")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B18") <> "" Then
listgraph.AddItem "Preliminary trading day from combined daily weights"
'datagraph$ = app.path & "\output\" & seriesgraph & ".B18"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1135")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B19") <> "" Then
listgraph.AddItem "Original series adjusted for preliminary trading day"
'datagraph$ = app.path & "\output\" & seriesgraph & ".B19"
End If
End If
End If
If Val(getvar("formx12", "arguments12")) <> 0 Then
If Val(getvar("regadjust", "save2")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".TD") <> "" Then
listgraph.AddItem "regARIMA Trading day factors"
End If
End If
End If
Case 8 'holiday factors
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx110")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".H1") <> "" Then
listgraph.AddItem "Combined X-11 holiday adjustment factors"
'datagraph$ = app.path & "\output\" & seriesgraph & ".H1"

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End If
End If
End If
If Val(getvar("formx12", "arguments12")) <> 0 Then
If Val(getvar("regadjust", "save3")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".HOL") <> "" Then
listgraph.AddItem "regARIMA Holiday factors"
End If
End If
End If
Case 9 'si-ratios (differences)
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx116")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".D8") <> "" Then
listgraph.AddItem "Final unmodified si-ratios"
'datagraph$ = app.path & "\output\" & seriesgraph & ".D8"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx117")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".D9") <> "" Then
listgraph.AddItem "Final replacement values for si-ratios, D iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".D9"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1124")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B3") <> "" Then
listgraph.AddItem "Preliminary unmodified si-ratios"
'datagraph$ = app.path & "\output\" & seriesgraph & ".B3"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1128")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".B8") <> "" Then
listgraph.AddItem "Unmodified si-ratios"
'datagraph$ = app.path & "\output\" & seriesgraph & ".B8"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1139")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".C4") <> "" Then
listgraph.AddItem "Modified si-ratios, C iteration ??"
'datagraph$ = app.path & "\output\" & seriesgraph & ".C4"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1143")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".C9") <> "" Then
listgraph.AddItem "Modified si-ratios, C iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".C9"
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1151")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".D4") <> "" Then
listgraph.AddItem "Modified si-ratios, D iteration"
'datagraph$ = app.path & "\output\" & seriesgraph & ".D4"
End If
End If
End If
Case 10 'extreme value, outliers
If Val(getvar("formx12", "arguments12")) <> 0 Then
If Val(getvar("regadjust", "save0")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".AO") <> "" Then
listgraph.AddItem "regARIMA Additive outlier factors"
End If

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End If
End If
If Val(getvar("formx12", "arguments12")) <> 0 Then
If Val(getvar("regadjust", "save1")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".LS") <> "" Then
listgraph.AddItem "regARIMA Level change and ramp factors"
End If
End If
End If
End If
Case 11 'forecasts
If Val(getvar("formx12", "arguments11")) <> 0 Then
If Val(getvar("forecast", "save0")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".FTR") <> "" Then
listgraph.AddItem "Forecasts on the transformed scale"
End If
End If
End If
If Val(getvar("formx12", "arguments11")) <> 0 Then
If Val(getvar("forecast", "save1")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".FVR") <> "" Then
listgraph.AddItem "Forecast error variances on the transformed scale"
End If
End If
End If
End If
If Val(getvar("formx12", "arguments11")) <> 0 Then
If Val(getvar("forecast", "save2")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph & ".FCT") <> "" Then
listgraph.AddItem "Forecasts on the original scale"
End If
End If
End If
End If
Case 12 'slidingspans
If Val(getvar("formx12", "arguments13")) <> 0 Then
If Val(getvar("sliding", "save0")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph$ & ".SFS") <> "" Then
listgraph.AddItem "Seasonal factors (sliding spans)"
End If
End If
End If
If Val(getvar("formx12", "arguments13")) <> 0 Then
If Val(getvar("sliding", "save1")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph$ & ".CHS") <> "" Then
listgraph.AddItem "Period-to-period changes (sliding spans)"
End If
End If
End If
If Val(getvar("formx12", "arguments13")) <> 0 Then
If Val(getvar("sliding", "save2")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph$ & ".SAS") <> "" Then
listgraph.AddItem "Seasonally adjusted series (sliding spans)"
End If
End If
End If
If Val(getvar("formx12", "arguments13")) <> 0 Then
If Val(getvar("sliding", "save3")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph$ & ".YCS") <> "" Then
listgraph.AddItem "Year-to-year changes (sliding spans)"
End If
End If
End If
If Val(getvar("formx12", "arguments13")) <> 0 Then
If Val(getvar("sliding", "save4")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph$ & ".TDS") <> "" Then
listgraph.AddItem "Trading day factors (sliding spans)"
End If
End If
End If
If Val(getvar("formx12", "arguments13")) <> 0 Then
If Val(getvar("sliding", "save5")) <> 0 Then
If Dir$(app.Path & "\output\" & seriesgraph$ & ".SIS") <> "" Then
listgraph.AddItem "Indirect seasonal factors (sliding spans)"
End If
End If
End If

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End If
If Val(getvar("formx12", "arguments13")) <> 0 Then
If Val(getvar("sliding", "save6")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".CIS") <> "" Then
    listgraph.AddItem "Indirect period-to-period changes (sliding spans)"
  End If
End If
End If
End If
If Val(getvar("formx12", "arguments13")) <> 0 Then
If Val(getvar("sliding", "save7")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".AIS") <> "" Then
    listgraph.AddItem "Indirect seasonally adjusted series (sliding spans)"
  End If
End If
End If
End If
If Val(getvar("formx12", "arguments13")) <> 0 Then
If Val(getvar("sliding", "save8")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".YIS") <> "" Then
    listgraph.AddItem "Indirect year-to-year changes (sliding spans)"
  End If
End If
End If
End If
Case 13 'history
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save0")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".ROT") <> "" Then
    listgraph.AddItem "Record for outliers"
  End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save1")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".SFH") <> "" Then
    listgraph.AddItem "Revision of seasonally adjusted data"
  End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save2")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".SAR") <> "" Then
    listgraph.AddItem "Revision of seasonal factors"
  End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save3")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".SAE") <> "" Then
    listgraph.AddItem "Revision of period-to-period changes in seas.adj."
  End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save4")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".SFR") <> "" Then
    listgraph.AddItem "Revision of trend-component"
  End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save5")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".SFE") <> "" Then
    listgraph.AddItem "Log-likelihood and AIC for observ."
  End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save6")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".CHR") <> "" Then
    listgraph.AddItem "Mean forecast errors for observ."
  End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then

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If Val(getvar("history", "save7")) <> 0 Then
  If Dir$(app.Path & "output\" & seriesgraph$ & ".CHE") <> "" Then
    listgraph.AddItem "Revision of period-to-period changes in trend"
  End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
  If Val(getvar("history", "save8")) <> 0 Then
    If Dir$(app.Path & "output\" & seriesgraph$ & ".TRR") <> "" Then
      listgraph.AddItem "Revision of projected seasonal factors"
    End If
  End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
  If Val(getvar("history", "save9")) <> 0 Then
    If Dir$(app.Path & "output\" & seriesgraph$ & ".TRE") <> "" Then
      listgraph.AddItem "Record of seasonal filter selection"
    End If
  End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
  If Val(getvar("history", "save10")) <> 0 Then
    If Dir$(app.Path & "output\" & seriesgraph$ & ".LKH") <> "" Then
      listgraph.AddItem "Estimates of seasonally adjusted data"
    End If
  End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
  If Val(getvar("history", "save11")) <> 0 Then
    If Dir$(app.Path & "output\" & seriesgraph$ & ".FCE") <> "" Then
      listgraph.AddItem "Estimates of seasonal factors"
    End If
  End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
  If Val(getvar("history", "save12")) <> 0 Then
    If Dir$(app.Path & "output\" & seriesgraph$ & ".TCR") <> "" Then
      listgraph.AddItem "Estimates of period-to-period"
    End If
  End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
  If Val(getvar("history", "save13")) <> 0 Then
    If Dir$(app.Path & "output\" & seriesgraph$ & ".TCE") <> "" Then
      listgraph.AddItem "Estimates of trend component"
    End If
  End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
  If Val(getvar("history", "save14")) <> 0 Then
    If Dir$(app.Path & "output\" & seriesgraph$ & ".PSR") <> "" Then
      listgraph.AddItem "Estimates of period-to-period changes in trend"
    End If
  End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
  If Val(getvar("history", "save15")) <> 0 Then
    If Dir$(app.Path & "output\" & seriesgraph$ & ".PSE") <> "" Then
      listgraph.AddItem "Estimates of the projected seasonal factors"
    End If
  End If
End If
Case 14 'composite
  If Val(getvar("formx12", "arguments15")) <> 0 Then
    If Val(getvar("composite", "save0")) <> 0 Then
      If Dir$(app.Path & "output\" & seriesgraph$ & ".CMS") <> "" Then
        listgraph.AddItem "Aggregated time series data"
      End If
    End If
  End If
  If Val(getvar("formx12", "arguments15")) <> 0 Then
    If Val(getvar("composite", "save1")) <> 0 Then
      If Dir$(app.Path & "output\" & seriesgraph$ & ".ID8") <> "" Then

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        listgraph.AddItem "Final unmodified si-ratios for the ind. adj."
    End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save2")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".ISF") <> "" Then
        listgraph.AddItem "Final seasonal factors for the ind. adj."
    End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save3")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".ISA") <> "" Then
        listgraph.AddItem "Final indirect seasonally adjusted series"
    End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save4")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".IAA") <> "" Then
        listgraph.AddItem "Final ind. seas. adj. series, with yearly totals adjusted"
    End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save5")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".IRN") <> "" Then
        listgraph.AddItem "Rounded indirect fianl seasonally adjusted series"
    End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save6")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".ITN") <> "" Then
        listgraph.AddItem "Final trend-cycle for the ind. adj."
    End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save7")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".IIR") <> "" Then
        listgraph.AddItem "Final irregular component for the ind. adj."
    End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save8")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".IE1") <> "" Then
        listgraph.AddItem "Original series modified for extreme values from the ind. adj."
    End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save9")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".IE2") <> "" Then
        listgraph.AddItem "Seas. adj. series modified for extreme values from ind. adj."
    End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save10")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".IE3") <> "" Then
        listgraph.AddItem "Irregular component modified for extreme values from the ind. seas. adj."
    End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save11")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".IE4") <> "" Then
        listgraph.AddItem "Percent changes in the original series"
    End If
End If
End If

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End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save12")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".IE5") <> "" Then
    listgraph.AddItem "Ratio of yearly totals for original, ind. adj. series"
  End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save13")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".IE6") <> "" Then
    listgraph.AddItem "Percent changes in the ind. seas. adj. series"
  End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save14")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".I6A") <> "" Then
    listgraph.AddItem "Percent changes for ind. seas. adj. series with revised yearly totals"
  End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save15")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".I6R") <> "" Then
    listgraph.AddItem "Percent changes for rounded ind. seas. adj. series"
  End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save16")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".IE7") <> "" Then
    listgraph.AddItem "Trend-cycle computed using series modified for extremes in ind. adj."
  End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save17")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".IEE") <> "" Then
    listgraph.AddItem "Robust final ind. seas. adj. series"
  End If
End If
End If
If Val(getvar("formx12", "arguments15")) <> 0 Then
If Val(getvar("composite", "save18")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".IF1") <> "" Then
    listgraph.AddItem "MCD moving average of the final ind. seas. adj. series"
  End If
End If
End If
End Select
mousepointer = 0

End Sub

Sub Command3DReturn_Click ()

  tables.Hide

End Sub

Sub Command3DSameGraph_Click ()
Dim x%, gNum%

  mousepointer = 11 'n
  Unload plot
  Unload graphvalues
  col% = 0
  ReDim grapharray(25, 600)
  listgraph.ListIndex = 0
  Erase GraphArrayLen
  gNum% = 0
  For x% = 0 To listgraph.ListCount - 1

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If listgraph.Selected(x%) = True Then
    'Unload plot
    ReDim Preserve GraphArrayLen(gNum%)
    GraphArrayLen(gNum%) = cargar_datos()
    gNum% = gNum% + 1
    plot.Show
End If
If listgraph.ListIndex < listgraph.ListCount - 1 Then
    listgraph.ListIndex = listgraph.ListIndex + 1
End If
Next x%
plot.Show
plot.Panel3DNameSeries.Caption = "Time Series " & seriesgraph$
mousepointer = 0 'n

End Sub

Sub Form_Activate ()
Dim x%

' 'cargar las series
' ListSeries.Clear
' If menuprincipal.ListSeries.List(0) <> "" Then
'     ListSeries.AddItem series_name(CStr(menuprincipal.ListSeries.List(0)))
' End If
' If menuprincipal.ListSeriesSingleSpec.List(0) <> "" Then
'     For X% = 0 To menuprincipal.ListSeriesSingleSpec.ListCount - 1
'         ListSeries.AddItem series_name(CStr(menuprincipal.ListSeriesSingleSpec.List(X%)))
'     Next X%
' End If
' 'poner alguna serie por defecto en el
' LabelSeries.caption = ListSeries.List(0)
'
' 'falta el de multi spec mode
'
' 'cargar los datos de gráficos posibles

'cargar las series
ListSeries.Clear
For x% = 0 To menuprincipal.List.ListCount - 1
    If menuprincipal.List.List(x%) <> "" Then
        ListSeries.AddItem series_name(CStr(menuprincipal.List.List(x%)))
    End If
Next x%
'If menuprincipal.ListSeriesSingleSpec.List(0) <> "" Then
' For X% = 0 To menuprincipal.ListSeriesSingleSpec.ListCount - 1
'     ListSeries.AddItem series_name(CStr(menuprincipal.ListSeriesSingleSpec.List(X%)))
' Next X%
' End If
'poner alguna serie por defecto en el LabelSeries
LabelSeries.Caption = ListSeries.List(0)

'falta el de multi spec mode

'cargar los datos de gráficos posibles
Call list_graph

End Sub

Sub Form_Load ()
Dim fichero$, x%

Call titleform
Me.Caption = titletables$

' col% = 0
' ReDim grapharray(25, 400)
'
' 'cargar las series
' ListSeries.Clear
' If menuprincipal.ListSeries.List(0) <> "" Then
'     ListSeries.AddItem series_name(CStr(menuprincipal.ListSeries.List(0)))
' End If

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```

' If menuprincipal.ListSeriesSingleSpec.List(0) <> "" Then
'   For X% = 0 To menuprincipal.ListSeriesSingleSpec.ListCount - 1
'     ListSeries.AddItem series_name(CStr(menuprincipal.ListSeriesSingleSpec.List(X%)))
'   Next X%
' End If
' poner alguna serie por defecto en el LabelSeries
' LabelSeries.caption = ListSeries.List(0)

' falta el de multi spec mode

' cargar los datos de gráficos posibles

col% = 0
ReDim grapharray(25, 400)

' cargar las series
ListSeries.Clear
For x% = 0 To menuprincipal.List.ListCount - 1
  If menuprincipal.List.List(x%) <> "" Then
    ListSeries.AddItem series_name(CStr(menuprincipal.List.List(x%)))
  End If
Next x%
' If menuprincipal.ListSeriesSingleSpec.List(0) <> "" Then
'   For X% = 0 To menuprincipal.ListSeriesSingleSpec.ListCount - 1
'     ListSeries.AddItem series_name(CStr(menuprincipal.ListSeriesSingleSpec.List(X%)))
'   Next X%
' End If
' poner alguna serie por defecto en el LabelSeries
LabelSeries.Caption = ListSeries.List(0)

' falta el de multi spec mode

' cargar los datos de gráficos posibles
Call list_graph
Me.Left = 15
Me.Top = 1050

End Sub

Sub LabelSeries_Change ()

  seriesgraph$ = LabelSeries.Caption

End Sub

Sub ListSeries_Click ()

  LabelSeries.Caption = ListSeries.List(ListSeries.ListIndex)
  seriesgraph$ = LabelSeries.Caption
  Call list_graph

End Sub

```

### 1.1.19. Plot.frm

VERSION 2.00

Begin Form Plot

```
BackColor = &H00C0C0C0&
Caption   = "Plot"
ClientHeight = 5070
ClientLeft = 75
ClientTop  = 1770
ClientWidth = 9360
Height     = 5475
Left       = 15
LinkTopic  = "Form1"
ScaleHeight = 5070
ScaleWidth  = 9360
Top        = 1425
Width      = 9480
```

Begin SSPanel Panel3DNameSeries

```
BevelOuter = 1 'Inset
ForeColor  = &H00000000&
Height     = 315
Left       = 2400
TabIndex   = 3
Top        = 60
Width      = 2835
```

End

Begin SSCommand Command3DPlot

```
BevelWidth = 1
Caption     = "&Exit"
ForeColor   = &H00000000&
Height      = 375
Left        = 7680
RoundedCorners = 0 'False
TabIndex    = 2
Top         = 1440
Width       = 1095
```

End

Begin SSCommand Command3DValues

```
BevelWidth = 1
Caption     = "Values"
ForeColor   = &H00000000&
Height      = 375
Left        = 7680
RoundedCorners = 0 'False
TabIndex    = 1
Top         = 900
Width       = 1095
```

End

Begin VtChart VtChart1

```
AutoIncrement = 0 'False
Column        = 1
ColumnLabelIndex = 1
ErrorOffset   = 20000
FileName       = PLOT.FRX:0000
Height        = 4575
Left          = 60
RandomFill    = -1 'True
Repaint       = -1 'True
Row           = 1
RowLabelIndex = 1
TabIndex      = 0
Top           = 420
Width         = 7455
```

End

End

Option Explicit

Sub Command3DPlot\_Click ()

```
Unload graphvalues
tables.Show
Unload Me
```

End Sub

Sub Command3DValues\_Click ()

graphvalues.Visible = True  
graphvalues.ZOrder

End Sub

Sub ChartData ()

Dim Range%, MaxVal#, MinVal#  
Dim X%, Y%, errorCode%, ssError%', GraphData#()  
'Dim clpstr\$  
Dim prevpos%, devpos%  
Dim prevVal#, devVal#, RealValue#  
Dim Period%  
Dim OrderCount%, Count%, IsRealData%, IsForecastData%  
Dim Buffer\$, Buffsize%  
Dim LastRow%, LastCol%  
Dim Pen As VtcPen  
Dim Color As VtcColor  
Dim PointBrush As VtcBrush  
Dim PointPen As VtcPen  
Dim PointMarker As VtcMarker  
Dim ForeDate As Variant  
Dim rect As VtcRect

'Nº de series:

errorCode% = VtChSetColumnCount(vtchart1.Handle, Col%)

'Set Labels for the chart

vtchart1.ColumnLabelCount = 1

vtchart1.RowLabelCount = 2

ssError = SSClearRange(graphvalues.SheetGraphData.SS, -1, -1, -1, -1, 1)

MaxVal# = GraphArray(0, 0)

MinVal# = MaxVal#

'Ponemos los datos de las series:

For X% = 0 To UBound(GraphArray, 2)

For Y% = 0 To UBound(GraphArrayLen)

If X% <= GraphArrayLen(Y%) - 2 Then

ssError = SSSetNumberRC(graphvalues.SheetGraphData.SS, X% + 2, Y% + 3, GraphArray(Y%, X))

If MaxVal# < GraphArray(Y%, X) Then MaxVal# = GraphArray(Y%, X)

If MinVal# > GraphArray(Y%, X) Then MinVal# = GraphArray(Y%, X)

End If

Next Y%

'ssError = SSSetTextRC(GraphValues.SheetGraphData.SS, x% + 2, 1, " " & Right\$(Format\$(Period%), 2))

'ssError = SSSetTextRC(GraphValues.SheetGraphData.SS, x% + 2, 2, " " & Right\$(Format\$(OrderCount%), 2))

"Period and Order count

'OrderCount% = OrderCount% + 1

'If OrderCount% <> 0 And OrderCount% > SeriesIds(0).Periodicity Then

' Period% = Period% + 1

' OrderCount% = 1

'End If

Next X%

MaxVal# = MaxVal# + (MaxVal# - MinVal#) \* .05

MinVal# = MinVal# - (MaxVal# - MinVal#) \* .05

errorCode% = VtChSetAxisValueScale(vtchart1.Handle, VtChAxisIdY, 1, False, MinVal#, MaxVal#, 3, 0)

'errorCode% = VtChSetAxisCategoryScale(VtChart1.Handle, VtChAxisIdX, 1, False, SeriesIds(0).Periodicity, SeriesIds(0).Periodicity)

' Get the last row and last column of the worksheet

' and create a Formula One reference

ssError = SSGetLastRow(graphvalues.SheetGraphData.SS, LastRow)

```

ssError = SSGetLastCol(graphvalues.SheetGraphData.SS, LastCol)

errorCode% = VtChSetRowCount(vtchart1.Handle, LastRow)

'Series colors:
Call SetSeriesColors(UBound(GraphArray) + 1)
For Y% = 0 To Col%
    errorCode% = VtChGetSeriesPen(vtchart1.Handle, Y% + 1, Pen)
    Pen.Width = 1
    errorCode% = VtChSetSeriesPen(vtchart1.Handle, Y% + 1, Pen)
Next Y%

'Linkatge de la fulla de càlcul amb el gràfic:
Buffer$ = Space$(10)
Buffsize% = 10

ssError = SSFormatRCNr(graphvalues.SheetGraphData.SS, LastRow, LastCol, False, Buffer$, Buffsize%)
Buffer$ = "A1:" + Buffer$

' Tell First Impression the worksheet, range, and parse method
vtchart1.SsLinkSheet = graphvalues.SheetGraphData.TableName
vtchart1.SsLinkRange = Buffer$
vtchart1.SsLinkMode = VtChSsLinkModeOn

'ssError% = VtChSetLegendLocation(VtChart1.Handle, True, VtChLocationTypeTopRight, Rect)

End Sub

Sub Form_Load ()

    Call titleform
    Me.Caption = titleplot$
    Call ChartData
    Me.Left = 15
    Me.Top = 1050

End Sub

Sub SetSeriesColors (NumSeries%)
Dim Pen As VtPen
Dim errorCode%

'Pen.Color.Red = 0
'Pen.Color.Green = 0
'Pen.Color.Blue = 255
'Pen.Style = VtPenStyleSolid
'Pen.Width = 0
'ErrorCode% = VtChSetSeriesPen(VtChart1.Handle, 1, Pen)
If NumSeries% > -1 Then
    Pen.Color.Red = 0
    Pen.Color.Green = 0
    Pen.Color.Blue = 255
    Pen.Style = VtPenStyleSolid
    errorCode% = VtChSetSeriesPen(vtchart1.Handle, 1, Pen)
End If
If NumSeries% > 0 Then
    Pen.Color.Red = 0'128
    Pen.Color.Green = 255'0
    Pen.Color.Blue = 0'128
    Pen.Style = VtPenStyleSolid
    errorCode% = VtChSetSeriesPen(vtchart1.Handle, 2, Pen)
End If
If NumSeries% > 1 Then
    Pen.Color.Red = 255
    Pen.Color.Green = 0
    Pen.Color.Blue = 255
    Pen.Style = VtPenStyleSolid
    errorCode% = VtChSetSeriesPen(vtchart1.Handle, 3, Pen)
End If
If NumSeries% > 2 Then
    Pen.Color.Red = 255
    Pen.Color.Green = 0

```

```
Pen.Color.Blue = 0
Pen.Style = VtPenStyleSolid
errorCode% = VtChSetSeriesPen(vtchart1.Handle, 4, Pen)
End If

End Sub
```

## 1.1.20. Graphval.frm

VERSION 2.00

Begin Form GraphValues

```
BackColor   = &H00808080&
Caption     = "Values"
ClientHeight = 5055
ClientLeft  = 210
ClientTop   = 1785
ClientWidth = 9330
Height      = 5460
Left        = 150
LinkTopic   = "Form1"
ScaleHeight = 5055
ScaleWidth  = 9330
Top         = 1440
Width       = 9450
```

Begin SSCommand Command3DGraphval

```
BevelWidth  = 1
Caption     = "&Exit"
Font3D      = 0 'None
ForeColor   = &H00000000&
Height      = 375
Left        = 1200
RoundedCorners = 0 'False
TabIndex    = 6
Top         = 4620
Width       = 1095
```

End

Begin SSView SheetGraphData

```
AllowAppLaunch = -1 'True
DataAutoAddNew = -1 'True
DataConnected  = -1 'True
DataFields     = ""
DataHdrField   = ""
DataRowsBuffered= 64
DataSetColumnFormats= -1 'True
DataSetColumnNames= -1 'True
DataSetColumnWidths= -1 'True
DataSetMaxCol  = -1 'True
DataSetMaxRow  = -1 'True
DoCancelEdit   = -1 'True
DoClick        = -1 'True
DoDataNewRow   = -1 'True
DoDataRowLoad  = -1 'True
DoDbClick      = -1 'True
DoEndEdit      = -1 'True
DoEndRecalc    = -1 'True
DoObjClick     = -1 'True
DoObjDbClick   = -1 'True
DoRClick       = -1 'True
DoRDbClick     = -1 'True
DoSelChange    = -1 'True
DoStartEdit    = -1 'True
DoStartRecalc  = -1 'True
DoTopLeftChanged= -1 'True
EditName       = "SSEdit1"
FileName       = GRAPHVAL.FRX:0000
Height         = 4515
Left           = 0
TabIndex       = 0
TableName      = "Dades"
Top            = 0
Width          = 7695
```

End

Begin SSCommand Command3DCopyPaste

```
BevelWidth  = 1
Caption     = "Imprimir"
Font3D      = 0 'None
FontBold    = 0 'False
FontItalic  = 0 'False
FontName    = "MS Sans Serif"
FontSize    = 8.25
```



```

FontStrikethru = 0 'False
FontUnderline = 0 'False
ForeColor      = &H00000000&
Height         = 315
Index          = 3
Left           = 3420
RoundedCorners = 0 'False
TabIndex       = 4
Top            = 4620
Width          = 1515
End
Begin CommonDialog CMDialog1
Left           = 8640
Top            = 4500
End
Begin SSCommand Command3DCopyPaste
BevelWidth     = 1
Caption        = "Exportar a Excel"
Font3D         = 0 'None
FontBold       = 0 'False
FontItalic     = 0 'False
FontName       = "MS Sans Serif"
FontSize       = 8.25
FontStrikethru = 0 'False
FontUnderline  = 0 'False
ForeColor      = &H00000000&
Height         = 315
Index          = 2
Left           = 5040
RoundedCorners = 0 'False
TabIndex       = 3
Top            = 4620
Width          = 1455
End
Begin SSCommand Command3DCopyPaste
BevelWidth     = 1
Caption        = "Pegar"
Font3D         = 0 'None
FontBold       = 0 'False
FontItalic     = 0 'False
FontName       = "MS Sans Serif"
FontSize       = 8.25
FontStrikethru = 0 'False
FontUnderline  = 0 'False
ForeColor      = &H00000000&
Height         = 315
Index          = 0
Left           = 600
RoundedCorners = 0 'False
TabIndex       = 2
Top            = 4620
Width          = 855
End
Begin SSCommand Command3DCopyPaste
BevelWidth     = 1
Caption        = "Copiar"
Font3D         = 0 'None
FontBold       = 0 'False
FontItalic     = 0 'False
FontName       = "MS Sans Serif"
FontSize       = 8.25
FontStrikethru = 0 'False
FontUnderline  = 0 'False
ForeColor      = &H00000000&
Height         = 315
Index          = 1
Left           = 1740
RoundedCorners = 0 'False
TabIndex       = 1
Top            = 4620
Width          = 855
End
Begin Label UM

```

```

    BorderStyle = 1 Fixed Single
    Height = 195
    Left = 0
    TabIndex = 5
    Top = 4680
    Visible = 0 False
    Width = 615
End
End
Option Explicit

Sub Command3DCopyPaste_Click (Index As Integer)
Dim ssError%
Dim ssError1%

On Error GoTo Command3DCopyPasteErr

Select Case Index%
Case 0
    ssError% = SSEditPaste(SheetGraphData.SS)
Case 1
    ssError% = SSEditCopy(SheetGraphData.SS)
Case 2
    CmDialog1.Flags = &H4&
    CmDialog1.Filename = "*.XLS"
    'CmDialog1.DialogTitle = Language$("excel_export") & " 4"
    CmDialog1.DefaultExt = ".XLS"
    CmDialog1.Action = 2
    If Len(CmDialog1.Filename) <> 0 And UCase(CmDialog1.Filename) <> "*.XLS" Then
        SheetGraphData.WriteExcel4 = CmDialog1.Filename
        MsgBox "Fulla exportada a " & CmDialog1.Filename, 64
    End If
Case 3
    ssError1% = SSFilePrint(SheetGraphData.SS, False)
End Select

Command3DCopyPasteErr:

End Sub

Sub Command3DGraphval_Click ()

    graphvalues.Hide

End Sub

Sub Form_Load ()

    Call titleform
    Me.Caption = titlegraphval$
    Me.Left = 15
    Me.Top = 1050

End Sub

Sub Form_QueryUnload (Cancel As Integer, UnloadMode As Integer)

    If UnloadMode = 0 Then
        Cancel = True
        Me.Hide
        'Me.WindowState = 1
    End If

End Sub

Sub Form_Resize ()

    On Error Resume Next

    Command3DCopyPaste(2).Left = Me.Width - Command3DCopyPaste(2).Width - 200
    Command3DCopyPaste(3).Left = Command3DCopyPaste(2).Left - Command3DCopyPaste(3).Width - 100
    Command3DCopyPaste(1).Left = Command3DCopyPaste(3).Left - Command3DCopyPaste(1).Width - 100
    Command3DCopyPaste(0).Left = Command3DCopyPaste(1).Left - Command3DCopyPaste(0).Width - 100

```

```
Command3DCopyPaste(2).Top = Me.Height - Command3DCopyPaste(0).Height - 500  
Command3DCopyPaste(3).Top = Me.Height - Command3DCopyPaste(0).Height - 500  
Command3DCopyPaste(1).Top = Me.Height - Command3DCopyPaste(0).Height - 500  
Command3DCopyPaste(0).Top = Me.Height - Command3DCopyPaste(0).Height - 500
```

```
SheetGraphData.Width = Me.Width - 300
```

```
SheetGraphData.Height = Command3DCopyPaste(2).Top - SheetGraphData.Top - 200
```

```
End Sub
```

## 1.2. FICHEROS .BAS (Módulos)

### 1.2.1. XGeneral.bas

Option Explicit

Global periodicidad\$, start\$, title\$, response%, maxmod%, maxao%, maxls%, maxrp%, maxuser%

Global checkcargar(15)

Global Actualform As Form

Global titlenu\$, titleformx12\$, titlegraph\$, titleseries\$, titlecomposite\$

Global titletransform\$, titlex11\$, titleidentify\$, titleregression\$, titlearima\$

Global titleautomdl\$, titleestimate\$, titleoutlier\$, titlecheck\$, titleforecast\$

Global titlereadjust\$, titleslidingspans\$, titlehistory\$

Global titleerror\$, titleoutput\$, titlegraphval\$, titleplot\$, titletables\$

'Global grapharray!(), garpharraylen(), datagraph\$, seriesgraph\$, col%'ponerlo en otro .bas

Declare Function SetParent Lib "User" (ByVal hwndchild As Integer, ByVal hwndnewparent As Integer) As Integer

Declare Function OsGetPrivateProfileString% Lib "Kernel" Alias "GetPrivateProfileString" (ByVal AppName\$, ByVal KeyName\$, ByVal keydefault\$, ByVal ReturnString\$, ByVal NumBytes%, ByVal FileName\$)

Declare Function OSWritePrivateProfileString% Lib "Kernel" Alias "WritePrivateProfileString" (ByVal AppName\$, ByVal KeyName\$, ByVal keydefault\$, ByVal FileName\$)

Declare Function getmoduleusage% Lib "Kernel" (ByVal hModule%)

Global X12IniFile\$

Global CRLF\$, Tabul\$

Sub combo\_arima ()

    arima.ComboArimaFix.Clear

    arima.ComboArimaFix.AddItem "regression and ARMA parameters"

    arima.ComboArimaFix.AddItem "ARMA parameters"

    arima.ComboArimaFix.AddItem "none of the parameters"

End Sub

Sub combo\_automdl ()

    automdl.ComboAutomdl(0).Clear

    automdl.ComboAutomdl(0).AddItem "produce a year of forecasts"

    automdl.ComboAutomdl(0).AddItem "produce a year of forecasts and backcasts"

    automdl.ComboAutomdl(1).Clear

    automdl.ComboAutomdl(1).AddItem "first model that satisfies the criteria"

    automdl.ComboAutomdl(1).AddItem "model with the lowest within-sample forecast error"

    automdl.ComboAutomdl(2).Clear

    automdl.ComboAutomdl(2).AddItem "outlier identification is done for each model"

    automdl.ComboAutomdl(2).AddItem "outlier identification is done only in the first model"

    automdl.ComboAutomdl(3).Clear

    automdl.ComboAutomdl(3).AddItem "out-of-sample forecasts errors"

    automdl.ComboAutomdl(3).AddItem "within-sample forecasts errors"

End Sub

Sub combo\_composite ()

    composite.ComboCompositeSpectrumtype.Clear

    composite.ComboCompositeSpectrumtype.AddItem "periodogram"

    composite.ComboCompositeSpectrumtype.AddItem "AR-spectrum"

End Sub

Sub combo\_estimate ()

    estimate.ComboEstimateParms.Clear

    estimate.ComboEstimateParms.AddItem "estimate model parameters"

    estimate.ComboEstimateParms.AddItem "evaluate the likelihood function"

    estimate.ComboEstimateExact.Clear

    estimate.ComboEstimateExact.AddItem "exact for AR and MA parameters"

    estimate.ComboEstimateExact.AddItem "exact for MA but conditional for AR"

    estimate.ComboEstimateExact.AddItem "conditional for AR and MA parameters"

    estimate.ComboEstimateOutofsample.Clear

    estimate.ComboEstimateOutofsample.AddItem "out-of-sample forecasts errors"

    estimate.ComboEstimateOutofsample.AddItem "within-sample forecasts errors"

End Sub

Sub combo\_history ()

```
history.ComboHistoryType.Clear
history.ComboHistoryType.AddItem "points corresponding to the calendar month or quarter"
history.ComboHistoryType.AddItem "all points"
history.ComboHistoryRefresh.Clear
history.ComboHistoryRefresh.AddItem "parameters estimation from the last model evaluation"
history.ComboHistoryRefresh.AddItem "estimates derived from the entire series"
history.ComboHistoryAdjfst.Clear
history.ComboHistoryAdjfst.AddItem "prior adjustments are incorporated into the forecasts"
history.ComboHistoryAdjfst.AddItem "the forecasts are produced for the prior adjusted series"
history.ComboHistoryOutlier.Clear
history.ComboHistoryOutlier.AddItem "all outliers keep in the RegARIMA model" 'n
history.ComboHistoryOutlier.AddItem "all outliers removed and not estimated" 'n
history.ComboHistoryOutlier.AddItem "outliers out of the period for outlier identification removed" 'n
```

End Sub

Sub combo\_outlier ()

```
outlier.ComboOutlierTypes.Clear
outlier.ComboOutlierTypes.AddItem "ao"
outlier.ComboOutlierTypes.AddItem "ls"
outlier.ComboOutlierTypes.AddItem "all"
outlier.ComboOutlierMethod.Clear
outlier.ComboOutlierMethod.AddItem "addone"
outlier.ComboOutlierMethod.AddItem "addall"
```

End Sub

Sub combo\_regadjust ()

```
regadjust.ComboRegadjustAugmentusertd.Clear
regadjust.ComboRegadjustAugmentusertd.AddItem "a combination of all trading day factors"
regadjust.ComboRegadjustAugmentusertd.AddItem "trading day factors derived from the user-defined variables"
```

End Sub

Sub combo\_regression ()

```
regression.ComboRegressionFormat.Clear
regression.ComboRegressionFormat.AddItem "free format"
regression.ComboRegressionFormat.AddItem "fortran format"
regression.ComboRegressionFormat.AddItem "edit-date"
regression.ComboRegressionFormat.AddItem "x12save"
regression.ComboRegressionAictest.Clear
regression.ComboRegressionAictest.AddItem "trading day"
regression.ComboRegressionAictest.AddItem "six td contrast variables"
regression.ComboRegressionAictest.AddItem "stock trading day"
```

End Sub

Sub combo\_series ()

```
series.ComboSeriesPeriod.Clear
series.ComboSeriesPeriod.AddItem "4"
series.ComboSeriesPeriod.AddItem "12"
series.ComboSeriesFormat.Clear
series.ComboSeriesFormat.AddItem "free format"
series.ComboSeriesFormat.AddItem "fortran format"
series.ComboSeriesFormat.AddItem "1r"
series.ComboSeriesFormat.AddItem "2r"
series.ComboSeriesFormat.AddItem "11"
series.ComboSeriesFormat.AddItem "21"
series.ComboSeriesFormat.AddItem "cs"
series.ComboSeriesFormat.AddItem "edit-date"
series.ComboSeriesFormat.AddItem "x12save"
series.ComboSeriesSpectrumtype.Clear
series.ComboSeriesSpectrumtype.AddItem "periodogram"
series.ComboSeriesSpectrumtype.AddItem "AR-spectrum"
series.ComboSeriesComptype.Clear
```

```

series.ComboSeriesComptype.AddItem "added"
series.ComboSeriesComptype.AddItem "multiplied"
series.ComboSeriesComptype.AddItem "subtracted"
series.ComboSeriesComptype.AddItem "divided"

```

End Sub

Sub combo\_sliding ()

```

sliding.ComboSlidingOutlier.Clear
sliding.ComboSlidingOutlier.AddItem "not performe outlier identification"
sliding.ComboSlidingOutlier.AddItem "outlier identification in each estimation"
sliding.ComboSlidingOutlier.AddItem "only carrie over any outlier"
sliding.ComboSlidingFixmissing.Clear
sliding.ComboSlidingFixmissing.AddItem "replace for each new estimation"
sliding.ComboSlidingFixmissing.AddItem "use the original replacement value"
sliding.ComboSlidingFixmdl.Clear
sliding.ComboSlidingFixmdl.AddItem "parameters fixed and not reestimated"
sliding.ComboSlidingFixmdl.AddItem "restore initial values and reestimate"
sliding.ComboSlidingFixmdl.AddItem "default initial values and reestimate"

```

End Sub

Sub combo\_transform ()

```

transform.ComboTransformFunction.Clear
transform.ComboTransformFunction.AddItem "none" 'poner el rango de valores de Yt
transform.ComboTransformFunction.AddItem "log"
transform.ComboTransformFunction.AddItem "sqrt"
transform.ComboTransformFunction.AddItem "inverse"
transform.ComboTransformFunction.AddItem "logistic"
transform.ComboTransformAdjust.Clear
transform.ComboTransformAdjust.AddItem "adjustment on monthly data"
transform.ComboTransformAdjust.AddItem "adjustment on quarterly data"
transform.ComboTransformAdjust.AddItem "no adjustment"
transform.ComboTransformFormat.Clear
transform.ComboTransformFormat.AddItem "free format"
transform.ComboTransformFormat.AddItem "fortran format"
transform.ComboTransformFormat.AddItem "1r"
transform.ComboTransformFormat.AddItem "2r"
transform.ComboTransformFormat.AddItem "1l"
transform.ComboTransformFormat.AddItem "2l"
transform.ComboTransformFormat.AddItem "cs"
transform.ComboTransformFormat.AddItem "edit-date"
transform.ComboTransformFormat.AddItem "x12save"
transform.ComboTransformMode.Clear
transform.ComboTransformMode.AddItem "factors in percents divided into the series"
transform.ComboTransformMode.AddItem "factors in ratios divided into the series"
transform.ComboTransformMode.AddItem "factors subtracted from the series"
transform.ComboTransformApply.Clear
transform.ComboTransformApply.AddItem "only in the modelling phase"
transform.ComboTransformApply.AddItem "only in the seasonal adjustment phase"
transform.ComboTransformApply.AddItem "in both phases"

```

End Sub

Sub combo\_x11 ()

```

x11.ComboX11Mode.Clear
x11.ComboX11Mode.AddItem "multiplicative"
x11.ComboX11Mode.AddItem "additive"
x11.ComboX11Mode.AddItem "pseudo-additive"
x11.ComboX11Mode.AddItem "log-additive"
x11.ComboX11Seasonalma.Clear
x11.ComboX11Seasonalma.AddItem "a 3x3 moving average"
x11.ComboX11Seasonalma.AddItem "a 3x5 moving average"
x11.ComboX11Seasonalma.AddItem "a 3x9 moving average"
x11.ComboX11Seasonalma.AddItem "a 3x15 moving average"
x11.ComboX11Seasonalma.AddItem "stable seasonal filter"
x11.ComboX11Seasonalma.AddItem "initially 3x3 and finally 3x5"
x11.ComboX11Td.Clear
x11.ComboX11Td.AddItem "apply"
x11.ComboX11Td.AddItem "significant"

```

```

x11.ComboX11Td.AddItem "noapply"
x11.ComboX11Td.AddItem "prior"
x11.ComboX11Td.AddItem "priorsignificant"
x11.ComboX11Final.Clear
x11.ComboX11Final.AddItem "prior adjustment factors"
x11.ComboX11Final.AddItem "holiday adjustment factors"
x11.ComboX11Final.AddItem "no remove adjustment factors"
x11.ComboX11Lom.Clear
x11.ComboX11Lom.AddItem "include in the trading day component"
x11.ComboX11Lom.AddItem "include in the seasonal component"
x11.ComboX11Calendarsigma.Clear
x11.ComboX11Calendarsigma.AddItem "default"
x11.ComboX11Calendarsigma.AddItem "computed separately for each month (quarter)"
x11.ComboX11Calendarsigma.AddItem "computed separately only if Cochran's"
x11.ComboX11Calendarsigma.AddItem "computed separately for each grup"
x11.ComboX11Shortsf.Clear
x11.ComboX11Shortsf.AddItem "stable seasonal filter"
x11.ComboX11Shortsf.AddItem "seasonal filter selected before"
x11.ComboX11Extremeadj.Clear
x11.ComboX11Extremeadj.AddItem "sample standar deviation"
x11.ComboX11Extremeadj.AddItem "weighted median absolute deviation"
x11.ComboX11Extremeadj.AddItem "exponential of weighted median absolute deviation of the logs"
x11.ComboX11Force.Clear
'explicarlo más en el help
x11.ComboX11Force.AddItem "same yearly totals"
x11.ComboX11Force.AddItem "same rounded totals"
x11.ComboX11Force.AddItem "first yearly totals and then rounded total"

```

End Sub

Function Ctovbstring\$ (InString\$)

```
Ctovbstring = Mid$(InString$, 1, Len(InString$) - 1)
```

End Function

Sub descargar ()

```

Unload arima
Unload automdl
Unload check
Unload composite
Unload estimate
Unload forecast
Unload history
Unload identify
Unload outlier
Unload regadjust
Unload regression
Unload series
Unload sliding
Unload transform
Unload x11
'Unload errorform
'Unload outputform
'Unload graphvalues
'Unload plot
'Unload tables
'Unload formx12

```

End Sub

Sub inicializar ()

Dim X%

```
title$ = "X-12-ARIMA"
```

```
Call titleform
```

```
'periodicidad$ = series.ComboSeriesPeriod.List(series.ComboSeriesPeriod.ListIndex)
```

```
'start$ = series.TextSeriesStart.Text
```

```
If (getvar("series", "period")) = 0 Then
```

```
    periodicidad$ = "4"
```

```
End If
```

```

If (getvar("series", "period")) = 1 Then
    periodicidad$ = "12"
End If
start$ = (getvar("series", "start"))

```

```

Unload series

```

```

'transform.TextTransformStart.Text = start$
'outlier.TextOutlierSpan(0).Text = start$
'series.TextSeriesSpan(0).Text = start$
'series.TextSeriesModelspan(0).Text = start$
'composite.TextCompositeModelspan(0).Text = start$
'x11.TextX11Tdstart.Text = Left$(start$, 4)
'x11.TextX11Tdapply.Text = Left$(start$, 4)
col% = 0

```

```

'me parece que de aquí para abajo no sirve para nada
For X% = 1 To 15
    checkcargar(X%) = "no"
    Call setvar("formx12", "arguments" & X% - 1, False)
Next X%

```

```

Call setvar("series", "cargar", checkcargar(1))
Call setvar("composite", "cargar", checkcargar(2))
Call setvar("transform", "cargar", checkcargar(3))
Call setvar("x11", "cargar", checkcargar(4))
Call setvar("identify", "cargar", checkcargar(5))
Call setvar("regression", "cargar", checkcargar(6))
Call setvar("arima", "cargar", checkcargar(7))
Call setvar("automdl", "cargar", checkcargar(8))
Call setvar("estimate", "cargar", checkcargar(9))
Call setvar("outlier", "cargar", checkcargar(10))
Call setvar("check", "cargar", checkcargar(11))
Call setvar("forecast", "cargar", checkcargar(12))
Call setvar("regadjust", "cargar", checkcargar(13))
Call setvar("sliding", "cargar", checkcargar(14))
Call setvar("history", "cargar", checkcargar(15))
'hasta aquí no sirve para nada

```

```

End Sub

```

```

Sub inicializar_arima ()
Dim X%

```

```

'mirar Call setvar("arima", "fix", 0)
Call setvar("arima", "title", "ARIMA model")
For X% = 0 To 5 'inicializar hasta x%=14
    Call setvar("arima", "model" & X%, 0)
Next X%

```

```

End Sub

```

```

Sub inicializar_automdl ()
Dim X%, numfichero%, texto$, Ret$

```

```

Ret$ = Chr(13) & Chr(10)
'cargar los listindex de combo
Call setvar("automdl", "comboautomdl0", 0)
Call setvar("automdl", "comboautomdl1", 1)
Call setvar("automdl", "comboautomdl2", 1)
Call setvar("automdl", "comboautomdl3", 1)

```

```

'no hace falta el file
Call setvar("automdl", "textlimit0", 15)
Call setvar("automdl", "textlimit1", 20)
Call setvar("automdl", "textlimit2", 5)
Call setvar("automdl", "textlimit3", "0.9")
Call setvar("automdl", "maxmod", 5)
Call setvar("automdl", "models0", "(0 1 1) (0 1 1)")
Call setvar("automdl", "models1", "(0 1 2) (0 1 1)")
Call setvar("automdl", "models2", "(2 1 0) (0 1 1)")
Call setvar("automdl", "models3", "(0 2 2) (0 1 1)")

```



```

Call setvar("automdl", "models4", "(2 1 2) (0 1 1)")
texto = ""
For X% = 0 To 3
    texto = texto & getvar("automdl", "models" & X%) & " X" & Ret
Next X%
texto = texto & getvar("automdl", "models4") & Ret
numfichero = FreeFile
Open app.Path & "\output\modelo.mdl" For Output As 1
Print #1, texto
Close 1

```

End Sub

Sub inicializar\_composite ()

Dim X%

```

Call setvar("composite", "textdecimals0", 0)
'composite.textcompositespectrumstart.text= ??
Call setvar("composite", "textdecimals1", 15)
'cargar listindex de combo
Call setvar("composite", "spectrumtype", 1)
Call setvar("composite", "textcomposite0", start$)
Call setvar("composite", "diftspectrum0", True)
Call setvar("composite", "diftspectrum1", False)
For X% = 0 To 7
    Call setvar("composite", "save" & X%, True)
Next X%
For X% = 8 To 11
    Call setvar("composite", "save" & X%, False)
Next X%
For X% = 12 To 16
    Call setvar("composite", "save" & X%, True)
Next X%
For X% = 17 To 18
    Call setvar("composite", "save" & X%, False)
Next X%

```

End Sub

Sub inicializar\_check ()

Dim X%

```

Call setvar("check", "textmaxlag", 36)
For X% = 0 To 1
    Call setvar("check", "save" & X%, True)
Next X%

```

End Sub

Sub inicializar\_estimate ()

Dim X%

```

'cargar listindex de combo
Call setvar("estimate", "parms", 0)
Call setvar("estimate", "exact", 0)
Call setvar("estimate", "outofsample", 1)

Call setvar("estimate", "tol", "0.00001")
Call setvar("estimate", "textmaxiter", 200)
Call setvar("estimate", "checkestimate0", True)
Call setvar("estimate", "checkestimate1", False)
Call setvar("estimate", "checkestimate2", True)

```

End Sub

Sub inicializar\_forecast ()

Dim X%

```

Call setvar("forecast", "textforecast0", periodicidad$)
Call setvar("forecast", "textforecast1", 0)
Call setvar("forecast", "textforecast2", 0)
Call setvar("forecast", "textforecast3", "0.95")

```

```

For X% = 0 To 2
    Call setvar("forecast", "save" & X%, True)
Next X%

```

End Sub

```

Sub inicializar_history ()
Dim X%

```

```

'cargar listindex de combo
Call setvar("history", "combotype", 1)
Call setvar("history", "refresh", 1)
Call setvar("history", "adjfst", 0)
Call setvar("history", "outlier", 0)

Call setvar("history", "revisionlag", 1) 'mirar pq el cero no funciona
Call setvar("history", "fststep0", 1)
Call setvar("history", "fststep1", periodicidad$)
Call setvar("history", "outlierwin", periodicidad$)
Call setvar("history", "checkestimates0", True)
Call setvar("history", "checkhistory0", False)
Call setvar("history", "checkhistory1", True)
Call setvar("history", "checkhistory2", False)
For X% = 1 To 7
    Call setvar("history", "checkestimates" & X%, False)
Next X%

```

End Sub

```

Sub inicializar_identify ()

```

```

    Call setvar("identify", "text0", 0)
    Call setvar("identify", "text1", 0)
    Call setvar("identify", "text2", 36)

```

End Sub

```

Sub inicializar_outlier ()
Dim X%

```

```

'cargar listindex de combo
Call setvar("outlier", "types", 2)
Call setvar("outlier", "method", 0)

For X% = 0 To 1
    Call setvar("outlier", "critical" & X%, "3.3")
Next X%
Call setvar("outlier", "textlsrun", 0)
Call setvar("outlier", "span0", start$)

```

End Sub

```

Sub inicializar_regadjust ()
Dim X%

```

```

'cargar listindex de combo
Call setvar("regadjust", "augmentusertd", 0)
Call setvar("regadjust", "listchoices0", "constant") 'n
Call setvar("regadjust", "listchoices1", "td") 'n
Call setvar("regadjust", "listchoices2", "ao")
Call setvar("regadjust", "listchoices3", "ls")
Call setvar("regadjust", "listchoices4", "rp") 'n
Call setvar("regadjust", "listchoices5", "holiday") 'n
Call setvar("regadjust", "listchoices6", "seasonal")
Call setvar("regadjust", "listchoices7", "stocklom")
Call setvar("regadjust", "listchoices8", "lom") 'n
Call setvar("regadjust", "listchoices9", "loq") 'n
Call setvar("regadjust", "listchoices10", "lpyear") 'n
Call setvar("regadjust", "listchoices11", "user") 'n
Call setvar("regadjust", "optionuser0", True)

```

End Sub

```
Sub inicializar_regression ()
```

```
Dim X%
```

```
'cargar listindex de combo
```

```
Call setvar("regression", "comboformat", 0)
```

```
Call setvar("regression", "comboaictest", 0)
```

```
Call setvar("regression", "start", start$)
```

```
End Sub
```

```
Sub inicializar_series ()
```

```
Dim X%
```

```
Call setvar("series", "start", "0001.01")
```

```
For X% = 0 To 1
```

```
Call setvar("series", "textseries" & X%, 0)
```

```
Next X%
```

```
Call setvar("series", "compwt", 1)
```

```
Call setvar("series", "missingcode", -9999)
```

```
Call setvar("series", "missingval", 100000000)
```

```
Call setvar("series", "textseries2", 15)
```

```
' mirar Call setvar("series", "spectrumstart", "0001.01")
```

```
'cargar listindex de combos
```

```
Call setvar("series", "period", 1)
```

```
Call setvar("series", "comboformat", 0)
```

```
Call setvar("series", "spectrumtype", 1)
```

```
Call setvar("series", "diffspectrum", True)
```

```
Call setvar("series", "comptype", 0)
```

```
For X% = 0 To 1
```

```
Call setvar("series", "save" & X%, True)
```

```
Next X%
```

```
End Sub
```

```
Sub inicializar_sliding ()
```

```
Dim X%
```

```
'cargar listindex de combo
```

```
Call setvar("sliding", "outlier", 0)
```

```
Call setvar("sliding", "fixmissing", 1)
```

```
Call setvar("sliding", "fixmdl", 0)
```

```
Call setvar("sliding", "cutseas", "3.0")
```

```
Call setvar("sliding", "cutchg", "3.0")
```

```
Call setvar("sliding", "cuttd", "2.0")
```

```
End Sub
```

```
Sub inicializar_transform ()
```

```
Dim X%
```

```
Call setvar("transform", "start", "0001.01")
```

```
Call setvar("transform", "textprecision", 0)
```

```
Call setvar("transform", "power", 1)
```

```
'cargar listindex de combo
```

```
Call setvar("transform", "function", 0)
```

```
Call setvar("transform", "adjust", 2)
```

```
Call setvar("transform", "comboformat", 0)
```

```
Call setvar("transform", "mode", 0)
```

```
Call setvar("transform", "apply", 2)
```

```
For X% = 0 To 1
```

```
Call setvar("transform", "save" & X%, False)
```

```
Next X%
```

```
Call setvar("transform", "save2", True)
```

```
Call setvar("transform", "save3", False)
```

```
End Sub
```

```
Sub inicializar_x11 ()
```

```
Dim X%
```

```

'cargar listindex de combo
Call setvar("x11", "mode", 0)
Call setvar("x11", "seasonalma", 0)
Call setvar("x11", "combox11", 0)
Call setvar("x11", "final", 2)
Call setvar("x11", "combolom", 1)
Call setvar("x11", "calendarsigma", 0)
Call setvar("x11", "shortsf", 0)
Call setvar("x11", "extremeadj", 0)
Call setvar("x11", "force", 0)

Call setvar("x11", "texttrendma", 3)
Call setvar("x11", "sigmalim0", "1.5")
Call setvar("x11", "sigmalim1", "2.5")
'Call setvar("x11", "tdstart", "0001.01")
'call setvar("x11", "tdaply", "0001.01")
Call setvar("x11", "tdexclude", "2.5")
For X% = 0 To 6
    Call setvar("x11", "tdprior" & X%, "1.0")
Next X%
Call setvar("x11", "texttdmaxlead", periodicidad$)
Call setvar("x11", "taper", 1)
Call setvar("x11", "itrendma", 1)
Call setvar("x11", "seasonalma0", True)
Call setvar("x11", "seasonalma1", False)
Call setvar("x11", "seasonalma2", False)
Call setvar("x11", "type", True) 'n
For X% = 0 To 61
    Call setvar("x11", "checkx11" & X%, False)
Next X%
Call setvar("x11", "checkx112", True)
For X% = 8 To 10
    Call setvar("x11", "checkx11" & X%, True)
Next X%
For X% = 13 To 14
    Call setvar("x11", "checkx11" & X%, True)
Next X%
Call setvar("x11", "checkx1116", True)
Call setvar("x11", "checkx1135", True)
For X% = 55 To 56
    Call setvar("x11", "checkx11" & X%, True)
Next X%

```

End Sub

Sub periodo ()

```

Select Case periodicidad$
    Case "12"
        regression.Check3DRegressionVariables(6).Enabled = False
        regression.Check3DRegressionVariables(6).Value = False
        regression.Check3DRegressionVariables(6).FontBold = True
        If transform.ComboTransformAdjust.ListIndex = 1 Then
            response% = MsgBox("The adjustment must be on monthly data", 48, title$)
            transform.ComboTransformAdjust.SetFocus
        End If
    Case "4"
        regression.Check3DRegressionVariables(5).Enabled = False
        regression.Check3DRegressionVariables(5).Value = False
        regression.Check3DRegressionVariables(5).FontBold = True
        If transform.ComboTransformAdjust.ListIndex = 0 Then
            response% = MsgBox("The adjustment must be on quarterly data", 48, title$)
            transform.ComboTransformAdjust.SetFocus
        End If
End Select

```

End Sub

Function Strtran\$ (ByVal in\$, char1\$, char2\$)

Dim X&

Dim out\$

Dim char\$

Dim charlen%

```
Dim centinela%
```

```
charlen% = Len(char1$)
```

```
For X& = 1 To Len(in$)
```

```
char$ = Mid$(in$, X&, charlen%)
```

```
If char$ = char1$ Then
```

```
out$ = out$ & char2$
```

```
centinela% = charlen%
```

```
ElseIf centinela <= 0 Then
```

```
out$ = out$ & Left$(char$, 1)
```

```
End If
```

```
centinela% = centinela% - 1
```

```
Next X&
```

```
Strtran$ = out$
```

```
End Function
```

```
Sub titleform ()
```

```
titlemenu$ = "ISAX (" & LCase(X12IniFile$) & ")"
```

```
titleformx12$ = "ISAX Configuration (" & LCase(X12IniFile$) & ")"
```

```
titlegraph$ = "Graphics (" & LCase(X12IniFile$) & ")"
```

```
titleerror$ = "Error (" & LCase(X12IniFile$) & ")"
```

```
titleoutput$ = "Output (" & LCase(X12IniFile$) & ")"
```

```
titlegraphval$ = "Values (" & LCase(X12IniFile$) & ")"
```

```
titleplot$ = "Plot (" & LCase(X12IniFile$) & ")"
```

```
titletables$ = "Graphics (" & LCase(X12IniFile$) & ")"
```

```
End Sub
```

```
Function validar (tecla As Integer)
```

```
Dim c As String * 1
```

```
c = Chr(tecla)
```

```
If (c < "0" Or c > "9") And c <> Chr(13) And c <> Chr(8) And c <> "." And c <> "-" And c <> " " Then
```

```
validar = 0
```

```
Else
```

```
validar = tecla
```

```
End If
```

```
End Function
```

```
Sub validar_arguments ()
```

```
Dim i%
```

```
'Select Case i
```

```
'Case 0 'series
```

```
'If formx12.Arguments(0).Checked = True Then
```

```
' If formx12.Arguments(1).Checked = True Then
```

```
' response% = MsgBox("Series cannot be used with composite", 48, title$)
```

```
' formx12.Arguments(0).Checked = False
```

```
' End If
```

```
'End If
```

```
'Case 1 'composite
```

```
'Case 2 'transform
```

```
'Case 3 'x11
```

```
'Case 4 'identify
```

```
'Case 5 'regression
```

```
'Case 6 'arima
```

```
'Case 7 'automdl
```

```
'Case 8 'estimate
```

```
'Case 9 'outlier
```

```
'Case 10 'check
```

```
'Case 11 'forecast
```

```
'Case 12 'regadjust
```

```
'Case 13 'slidingspans
```

```
'Case 14 'history
```

```
'End Select
```

End Sub

## 1.2.2. X12Comun.bas

Option Explicit

Function Cargar\_datos1% (fn%, col%)

Dim ch\$, r%, aux\$

ch\$ = Input\$(1, fn%)

r% = 0

aux\$ = ""

'eliminar las dos primeras filas

While ch\$ <> Chr(13)

ch\$ = Input\$(1, fn%)

Wend

ch\$ = Input\$(1, fn%)

While ch\$ <> Chr(13)

ch\$ = Input\$(1, fn%)

Wend

ch\$ = Input\$(1, fn%)

'leer los datos

While Not EOF(fn%)

While ch\$ <> Chr(9) And Not EOF(fn%)

ch\$ = Input\$(1, fn%)

Wend

While ch\$ <> Chr(13) And Not EOF(fn%)

ch\$ = Input\$(1, fn%)

If ch\$ <> Chr(13) Then

aux\$ = aux\$ & ch\$

End If

Wend

'ReDim Preserve GraphArray(25, r)

'ReDim Preserve grapharray(col, r)

GraphArray(col%, r) = Val(aux\$)

r = r + 1

aux\$ = ""

Wend

Cargar\_datos1% = r%

End Function

Sub execute\_0 (Serie\$)

Dim x%, ins\$, specname\$, f\$

'crear directorio output

If Dir\$(app.Path & "\output", 18) <> "" Then

If Dir\$(app.Path & "\output\" & series\_name(CStr(series!labelseriesfile.caption)) & ".\*") <> "" Then

If Dir\$(app.Path & "\output\" & series\_name(CStr((getvar("series", "file")))) & ".\*") <> "" Then

Kill app.Path & "\output\" & series\_name(CStr(series!labelseriesfile.caption)) & ".\*"

Kill app.Path & "\output\" & series\_name(CStr((getvar("series", "file")))) & ".\*"

End If

Else

MkDir app.Path & "\output"

End If

Call spec\_file

f\$ = Mid\$(menuprincipal.CMDialogSpec.FileName, 1, Len(menuprincipal.CMDialogSpec.FileName) - 4)

f\$ = app.Path & "\output\" & series\_name(CStr(seriesname))

f\$ = Mid\$(Serie\$, 1, Len(Serie\$) - 4)

If Dir\$(f\$ & ".x2d") <> "" Then Kill f\$ & ".x2d"

If Dir\$(f\$ & ".xdg") <> "" Then Kill f\$ & ".xdg"

ins\$ = app.Path & "\x12a.pif" & f\$ & " -n -p -s -o " & app.Path & "\output\" & series\_name(CStr(f\$))

menuprincipal.Command3D(2).Enabled = False

x% = Shell(ins\$, 2)

Do Until getmoduleusage(x%) = 0

DoEvents

Loop

menuprincipal.Command3D(2).Enabled = True

```

If Dir$(f$ & ".xdg") <> "" Then
' x% = Shell(app.Path & "x12diag.pif " & f$ & " -o " & app.Path & "output\" & series_name(CStr(f$)), 2)
' Do Until getmoduleusage(x%) = 0 'n
'   DoEvents 'n
'   Loop 'n
End If

```

```
End Sub
```

```
Function getvar (Carpeta$, VarName$)
```

```
Dim buff$, x%
```

```

buff$ = Space(50)
x% = OsGetPrivateProfileString(Carpeta$, VarName$, "", buff$, Len(buff$), X12IniFile$)
'getvar = Val(Strtran$(Ctovbstring(Trim(buff$)), ",", "."))
getvar = (Strtran$(Ctovbstring(Trim(buff$)), ",", "."))

```

```
End Function
```

```
Function series_name$ (Seriesfile$)
```

```
Dim var1$, c As String * 1, i%
```

```

If Mid$(Seriesfile, Len(Seriesfile) - 3, 1) = "." Then
var1 = Left$(Seriesfile, Len(Seriesfile) - 4)
i = Len(var1)
While c <> "\" And i > 1
i = i - 1
c = Mid$(var1, i, 1)
Wend
If c = "\" Then
series_name = Mid(var1, i + 1, Len(var1) - i)
Else
series_name = var1
End If

```

```
Else
```

```

If Mid$(Seriesfile, Len(Seriesfile) - 2, 1) = "." Then
var1 = Left$(Seriesfile, Len(Seriesfile) - 3)
i = Len(var1)
While c <> "\" And i > 1
i = i - 1
c = Mid$(var1, i, 1)
Wend
If c = "\" Then
series_name = Mid(var1, i + 1, Len(var1) - i)
Else
series_name = var1
End If

```

```
Else
```

```

If Mid$(Seriesfile, Len(Seriesfile) - 1, 1) = "." Then
var1 = Left$(Seriesfile, Len(Seriesfile) - 2)
i = Len(var1)
While c <> "\" And i > 1
i = i - 1
c = Mid$(var1, i, 1)
Wend
If c = "\" Then
series_name = Mid(var1, i + 1, Len(var1) - i)
Else
series_name = var1
End If

```

```
Else
```

```

var1 = Seriesfile
i = Len(var1)
While c <> "\" And i > 1
i = i - 1
c = Mid$(var1, i, 1)
Wend
If c = "\" Then

```



```

        series_name = Mid(var1, i + 1, Len(var1) - i)
    Else
        series_name = var1
    End If
End If
End If
End If
End If

End Function

Sub setvar (Carpeta$, VarName$, VarValue As Variant)
Dim x%

    x% = OSWritePrivateProfileString(Carpeta$, VarName$, VarValue, X12IniFile$)

End Sub

Sub spec_file ()
Dim texto$
Dim numfichero%

    'descargar
    Tabul$ = Chr(9)
    CRLF$ = Chr(13) & Chr(10)
    texto = ""

    If (getvar("formx12", "arguments0")) = True Then
        texto = texto & series_text()
    End If
    If (getvar("formx12", "arguments1")) = True Then
        texto = texto & composite_text()
    End If
    If (getvar("formx12", "arguments2")) = True Then
        texto = texto & transform_text()
    End If
    If (getvar("formx12", "arguments3")) = True Then
        texto = texto & x11_text()
    End If
    If (getvar("formx12", "arguments4")) = True Then
        texto = texto & identify_text()
    End If
    If (getvar("formx12", "arguments5")) = True Then
        texto = texto & regression_Text()
    End If
    If (getvar("formx12", "arguments6")) = True Then
        texto = texto & arima_text()
    End If
    If (getvar("formx12", "arguments7")) = True Then
        texto = texto & automdl_Text()
    End If
    If (getvar("formx12", "arguments8")) = True Then
        texto = texto & estimate_text()
    End If
    If (getvar("formx12", "arguments9")) = True Then
        texto = texto & outlier_Text()
    End If
    If (getvar("formx12", "arguments10")) = True Then
        texto = texto & check_Text()
    End If
    If (getvar("formx12", "arguments11")) = True Then
        texto = texto & forecast_text()
    End If
    If (getvar("formx12", "arguments12")) = True Then
        texto = texto & regadjust_Text()
    End If
    If (getvar("formx12", "arguments13")) = True Then
        texto = texto & slidingspans_text()
    End If
    If (getvar("formx12", "arguments14")) = True Then
        texto = texto & history_text()
    End If

    numfichero = FreeFile

```

```

'menuprincipal.CMDialogSpec.Action = 1
'Open menuprincipal.CMDialogSpec.Filename For Output As #1
Select Case runmode%
Case 0 'single mode (one series)
    seriesname = app.Path & "output\" & series_name(CStr(getvar("series", "file"))) & ".spc"
Case 1 'multiple mode (some series one configuration)
    seriesname = app.Path & "output\metafile.spc"
Case 2 'multiple mode (some series some configurations)
    seriesname = app.Path & "output\" & series_name(CStr(getvar("series", "file"))) & ".spc"
Case 3 'composite
    If Val(getvar("formx12", "arguments0")) <> 0 Then
        seriesname = app.Path & "output\" & series_name(CStr(getvar("series", "file"))) & ".spc"
    End If
    If Val(getvar("formx12", "arguments1")) <> 0 Then
        seriesname = app.Path & "output\" & (getvar("composite", "name")) & ".spc"
    End If
End Select

'If (getvar("series", "file")) <> "" Then
'    seriesname = app.Path & "output\" & series_name(CStr(getvar("series", "file"))) & ".spc"
' Else seriesname = app.Path & "output\metafile.spc"
'End If

Open seriesname For Output As 1
Print #1, texto
Close #1

End Sub

```

### 1.2.3. X12Specf.bas

Option Explicit  
Global seriesname\$

```
Function arima_text$ ()
Dim texto$, x%
Dim seaCnt%, paramCnt%

texto = ""
'If arima.Check3DArima.Value = False Then para recuperar un modelo
'aún no se puede hacer. No funciona x12
texto = texto & "arima{" & CRLF$ & Tabul$
'If arima.Check3DArima.Value = False Then
texto = texto & "model="
If Len(getvar("arima", "model0")) > 1 Then
    texto = texto & "[" & (getvar("arima", "model0")) & "]"
Else
    texto = texto & (getvar("arima", "model0")) & " "
End If
texto = texto & (getvar("arima", "model1")) & " "
If Len(getvar("arima", "model2")) > 1 Then
    texto = texto & "[" & (getvar("arima", "model2")) & "]"
Else
    texto = texto & (getvar("arima", "model2")) & " "
End If
texto = texto & ")"

'For x% = 0 To 2
' texto = texto & Val(getvar("arima", "model" & x%)) & " "
'Next x%

'texto = texto & ")" & "("
seaCnt% = 1
paramCnt% = 3
Do While Val(getvar("arima", "seaso" & seaCnt%)) <> 0
    texto = texto & "("

    texto = texto & Val(getvar("arima", "model" & paramCnt%)) & " "
    paramCnt% = paramCnt% + 1
    texto = texto & Val(getvar("arima", "model" & paramCnt%)) & " "
    paramCnt% = paramCnt% + 1
    texto = texto & Val(getvar("arima", "model" & paramCnt%))
    paramCnt% = paramCnt% + 1

    texto = texto & ")" & getvar("arima", "scaso" & seaCnt%)
    seaCnt% = seaCnt% + 1
Loop

texto = texto & CRLF$ & Tabul$

If (getvar("arima", "checklistar")) = "yes" Then 'lista no vacía
    texto = texto & "ar=("
    For x% = 0 To Val(getvar("arima", "maxar")) - 1
        texto = texto & (getvar("arima", "arparam" & x%)) & ", "
    Next x%
    texto = texto & (getvar("arima", "arparam" & Val(getvar("arima", "maxar")))) & ")"
    texto = texto & CRLF$ & Tabul$
End If
If (getvar("arima", "checklistma")) = "yes" Then 'lista no vacía
    texto = texto & "ma=("
    For x% = 0 To Val(getvar("arima", "maxma")) - 1
        texto = texto & (getvar("arima", "maparam" & x%)) & ", "
    Next x%
    texto = texto & (getvar("arima", "maparam" & Val(getvar("arima", "maxma")))) & ")"
    texto = texto & CRLF$ & Tabul$
End If
End If
'If arima.Check3DArima.Value = True Then
' texto = texto & "file=" & arima.TextArimaFile.Text & ""
' texto = texto & CRLF$ & Tabul$
```

```

'End If
texto = texto & "title=" & (getvar("arima", "title")) & ""
texto = texto & CRLF$ 'no tab
texto = texto & "}" & CRLF$ & CRLF$ 'no tab
'Else
' Open "c:\x12\serie.mdl" For Input As 1
' texto = texto & Input(LOF(1), 1)
' Close 1
' texto=texto & CRLF$ & Tabul$
' texto = texto & "fix="
' Select Case arima.ComboArimaFix.ListIndex
' Case 0
'   texto = texto & "both"
' Case 1
'   texto = texto & "arma"
' Case 2
'   texto = texto & "none"
' End Select
' texto = texto & CRLF$ & CRLF$
'End If

arima_text = texto

End Function

Function automdl_Text$ ()
Dim texto$

texto = ""
texto = texto & "automdl{" & CRLF$ & Tabul$
'mode
texto = texto & "method="
Select Case Val(getvar("automdl", "comboautomdl1"))
Case 0
  texto = texto & "first"
Case 1
  texto = texto & "best"
End Select
texto = texto & CRLF$ & Tabul$
texto = texto & "file="
texto = texto & app.Path & "\output\modelo.mdl"
'texto = texto & "file=" & automdl!TextAutomdlFile.Text & ""
texto = texto & CRLF$ & Tabul$
texto = texto & "fcstlim=" & (getvar("automdl", "textlimit0"))
texto = texto & CRLF$ & Tabul$
texto = texto & "bcstlim=" & (getvar("automdl", "textlimit1"))
texto = texto & CRLF$ & Tabul$
texto = texto & "qlim=" & (getvar("automdl", "textlimit2"))
texto = texto & CRLF$ & Tabul$
texto = texto & "overdiff=" & (getvar("automdl", "textlimit3"))
texto = texto & CRLF$ & Tabul$
texto = texto & "identify="
Select Case Val(getvar("automdl", "comboautomdl2"))
Case 0
  texto = texto & "all"
Case 1
  texto = texto & "first"
End Select
texto = texto & CRLF$ & Tabul$
texto = texto & "outofsample="
Select Case Val(getvar("automdl", "comboautomdl3"))
Case 0
  texto = texto & "yes"
Case 1
  texto = texto & "no"
End Select
texto = texto & CRLF$ & CRLF$ & Tabul$
texto = texto & "print=(all)"
texto = texto & CRLF$ 'no tab
texto = texto & "}" & CRLF$ & CRLF$ 'no tab

automdl_Text = texto

```

## End Function

Function composite\_text\$ ()

Dim texto\$, i%, a\$

```

texto = ""
texto = texto & "composite{ "
texto = texto & CRLF$ & Tabul$
texto = texto & "name=" & (getvar("composite", "name"))
texto = texto & CRLF$ & Tabul$
texto = texto & "decimals=" & (getvar("composite", "textdecimals0"))
texto = texto & CRLF$ & Tabul$
If Val(getvar("composite", "checkmodelspace")) <> 0 Then
    texto = texto & "modelspace="
    texto = texto & (getvar("composite", "textcomposite0")) & ", " & (getvar("composite", "textcomposite1"))
    texto = texto & ")" & CRLF$ & Tabul$
End If
If (getvar("composite", "spectrumstart")) <> "" Then
    texto = texto & "startspectrum=" & (getvar("composite", "spectrumstart"))
    texto = texto & CRLF$ & Tabul$
End If
texto = texto & "spectrumtype="
Select Case Val(getvar("composite", "spectrumtype"))
    Case 0
        texto = texto & "periodogram"
    Case 1
        texto = texto & "arspec"
End Select
texto = texto & CRLF$ & Tabul$
texto = texto & "diffspectrum="
If Val(getvar("composite", "diffspectrum0")) <> 0 Then
    texto = texto & "yes"
End If
If Val(getvar("composite", "diffspectrum1")) <> 0 Then
    texto = texto & "no"
End If
texto = texto & CRLF$ & Tabul$
texto = texto & "saveprecision=" & (getvar("composite", "textdecimals1"))
texto = texto & CRLF$ & Tabul$
For i = 0 To 18
    If Val(getvar("composite", "save" & i%)) <> 0 Then
        a = "true"
        Exit For
    End If
Next i%
If a = "true" Then
    texto = texto & "save=("
    If Val(getvar("composite", "save0")) <> 0 Then
        texto = texto & "cms "
    End If
    If Val(getvar("composite", "save1")) <> 0 Then
        texto = texto & "id8 "
    End If
    If Val(getvar("composite", "save2")) <> 0 Then
        texto = texto & "isf "
    End If
    If Val(getvar("composite", "save3")) <> 0 Then
        texto = texto & "isa "
    End If
    If Val(getvar("composite", "save4")) <> 0 Then
        texto = texto & "iaa "
    End If
    If Val(getvar("composite", "save5")) <> 0 Then
        texto = texto & "irn "
    End If
    If Val(getvar("composite", "save6")) <> 0 Then
        texto = texto & "itm "
    End If
    If Val(getvar("composite", "save7")) <> 0 Then
        texto = texto & "iir "
    End If
    If Val(getvar("composite", "save8")) <> 0 Then
        texto = texto & "ie1 "
    End If

```

```

End If
If Val(getvar("composite", "save9")) <> 0 Then
    texto = texto & "ie2 "
End If
If Val(getvar("composite", "save10")) <> 0 Then
    texto = texto & "ie3 "
End If
If Val(getvar("composite", "save11")) <> 0 Then
    texto = texto & "ie4 "
End If
If Val(getvar("composite", "save12")) <> 0 Then
    texto = texto & "ie5 "
End If
If Val(getvar("composite", "save13")) <> 0 Then
    texto = texto & "ie6 "
End If
If Val(getvar("composite", "save14")) <> 0 Then
    texto = texto & "iea "
End If
If Val(getvar("composite", "save15")) <> 0 Then
    texto = texto & "ier "
End If
If Val(getvar("composite", "save16")) <> 0 Then
    texto = texto & "ie7 "
End If
If Val(getvar("composite", "save17")) <> 0 Then
    texto = texto & "iee "
End If
If Val(getvar("composite", "save18")) <> 0 Then
    texto = texto & "ief "
End If
texto = texto & ")" & CRLF$ 'no tab
End If
texto = texto & "}" & CRLF$ & CRLF$ 'no tab

composite_text = texto

```

**End Function**

**Function check\_Text\$ ()**

**Dim** texto\$, i%, a\$

```

texto = ""
texto = texto & "check{" & CRLF$ & Tabul$
texto = texto & "maxlag=" & (getvar("check", "textmaxlag"))
texto = texto & CRLF$ & Tabul$
For i% = 0 To 1
    If Val(getvar("check", "save" & i%)) <> 0 Then
        a = "true"
        Exit For
    End If
Next i%
If a = "true" Then
    texto = texto & "save=("
    If Val(getvar("check", "save0")) <> 0 Then
        texto = texto & "acf "
    End If
    If Val(getvar("check", "save1")) <> 0 Then
        texto = texto & "pacf "
    End If
    texto = texto & ")" & CRLF$ 'no tab
End If
'quitar la fila entera
texto = texto & "print=(acfplot,pacfplot)" & CRLF$
texto = texto & "}" & CRLF$ & CRLF$

check_Text = texto

```

**End Function**

**Function estimate\_text\$ ()**

**Dim** texto\$, i%, a\$

```

texto = ""
texto = texto & "estimate{" & CRLF$ & Tabul$
texto = texto & "parms="
Select Case Val(getvar("estimate", "parms"))
  Case 0
    texto = texto & "estimated"
  Case 1
    texto = texto & "fixed"
End Select
texto = texto & CRLF$ & Tabul$
texto = texto & "tol=" & (getvar("estimate", "tol"))
texto = texto & CRLF$ & Tabul$
texto = texto & "maxiter=" & (getvar("estimate", "textmaxiter"))
texto = texto & CRLF$ & Tabul$
texto = texto & "exact="
Select Case Val(getvar("estimate", "exact"))
  Case 0
    texto = texto & "arma"
  Case 1
    texto = texto & "ma"
  Case 2
    texto = texto & "none"
End Select
texto = texto & CRLF$ & Tabul$
texto = texto & "outofsample="
Select Case Val(getvar("estimate", "outofsample"))
  Case 0
    texto = texto & "yes"
  Case 1
    texto = texto & "no"
End Select
texto = texto & CRLF$ & Tabul$
For i% = 0 To 2
  If Val(getvar("estimate", "checkestimate" & i%)) <> 0 Then
    a = "true"
    Exit For
  End If
Next i%
If a = "true" Then
  texto = texto & "save=("
  If estimate!Check3DEstimate(0).Value = True Then
    ' texto = texto & "iterations "
  End If
  If estimate!Check3DEstimate(1).Value = True Then
    ' texto = texto & "model "
  End If
  If estimate!Check3DEstimate(2).Value = True Then
    ' texto = texto & "regcmatrix "
  End If
  If estimate!Check3DEstimate(3).Value = True Then
    ' texto = texto & "armacmatrix "
  End If
  If estimate!Check3DEstimate(4).Value = True Then
    ' texto = texto & "estimates "
  End If
  If estimate!Check3DEstimate(5).Value = True Then
    ' texto = texto & "lkstats "
  End If
  If estimate!Check3DEstimate(6).Value = True Then
    ' texto = texto & "lkstats "
  End If
  If estimate!Check3DEstimate(7).Value = True Then
    ' texto = texto & "roots "
  End If
  If estimate!Check3DEstimate(8).Value = True Then
    ' texto = texto & "regressioneffects "
  End If
  If estimate!Check3DEstimate(9).Value = True Then
    ' texto = texto & "residuals "
  End If
  If Val(getvar("estimate", "checkestimate0")) <> 0 Then
    texto = texto & "residuals "
  End If
End If

```

```

End If
If Val(getvar("estimate", "checkestimate1")) <> 0 Then
    texto = texto & "model "
End If
If Val(getvar("estimate", "checkestimate2")) <> 0 Then
    texto = texto & "regressioneffects "
End If
texto = texto & ")" & CRLF$ & Tabul$
End If
texto = texto & "print=(all -regcmatrix -residuals "
texto = texto & "-regressioneffects)"
'mirar las tablas regressioneffects, averagefcsterr
texto = texto & CRLF$no tab
texto = texto & ")" & CRLF$ & CRLF$no tab

estimate_text = texto

End Function

Function forecast_text$ ()
Dim texto$, i%, a$

texto = ""
texto = texto & "forecast{" & CRLF$ & Tabul$
texto = texto & "maxlead=" & (getvar("forecast", "textforecast0"))
texto = texto & CRLF$ & Tabul$
texto = texto & "maxback=" & (getvar("forecast", "textforecast1"))
texto = texto & CRLF$ & Tabul$
texto = texto & "probability=" & (getvar("forecast", "textforecast3"))
texto = texto & CRLF$ & Tabul$
texto = texto & "exclude=" & (getvar("forecast", "textforecast2"))
texto = texto & CRLF$ & Tabul$
For i% = 0 To 2
    If Val(getvar("forecast", "save" & i%)) <> 0 Then
        a = "true"
        Exit For
    End If
Next i%
If a = "true" Then
    texto = texto & "save=("
    If Val(getvar("forecast", "save0")) <> 0 Then
        texto = texto & "transformed "
    End If
    If Val(getvar("forecast", "save1")) <> 0 Then
        texto = texto & "variances "
    End If
    If Val(getvar("forecast", "save2")) <> 0 Then
        texto = texto & "forecasts "
    End If
    texto = texto & ")" & CRLF$ & Tabul$
End If
texto = texto & "print=(all)" 'mirar las tablas (libreta)
texto = texto & CRLF$no tab
texto = texto & "}" & CRLF$ & CRLF$no tab

forecast_text = texto

End Function

Function history_text$ ()
Dim texto$, i%, a$

texto = ""
texto = texto & "history{" & CRLF$ & Tabul$
If (getvar("history", "start")) <> "" Then
    texto = texto & "start="
    texto = texto & (getvar("history", "start"))
    texto = texto & CRLF$ & Tabul$
End If
For i% = 0 To 7
    If Val(getvar("history", "checkestimates" & i%)) <> 0 Then
        a$ = "true"
        Exit For
    End If

```



```

End If
Next i%
If a$ = "true" Then
    texto = texto & "estimates=( "
    If Val(getvar("history", "checkestimates0")) <> 0 Then
        texto = texto & "sadj "
    End If
    If Val(getvar("history", "checkestimates1")) <> 0 Then
        texto = texto & "sf "
    End If
    If Val(getvar("history", "checkestimates2")) <> 0 Then
        texto = texto & "sf???"
    End If
    If Val(getvar("history", "checkestimates3")) <> 0 Then
        texto = texto & "chng "
    End If
    If Val(getvar("history", "checkestimates4")) <> 0 Then
        texto = texto & "trend "
    End If
    If Val(getvar("history", "checkestimates5")) <> 0 Then
        texto = texto & "trendch "
    End If
    If Val(getvar("history", "checkestimates6")) <> 0 Then
        texto = texto & "aic "
    End If
    If Val(getvar("history", "checkestimates7")) <> 0 Then
        texto = texto & "fcst "
    End If
    texto = texto & ")" & CRLF$ & Tabul$
End If
texto = texto & "type="
Select Case Val(getvar("history", "combotype"))
    Case 0
        texto = texto & "period"
    Case 1
        texto = texto & "all"
End Select
texto = texto & CRLF$ & Tabul$
If (getvar("history", "endtable")) <> "" Then
    texto = texto & "endtable="
    texto = texto & (getvar("history", "endtable"))
    texto = texto & CRLF$ & Tabul$
End If
texto = texto & "revisionlag="
texto = texto & (getvar("history", "revisionlag"))
texto = texto & CRLF$ & Tabul$
texto = texto & "fstep=( "
For i% = 0 To 3
    If (getvar("history", "fstep" & i%)) <> "" Then
        texto = texto & (getvar("history", "fstep" & i%)) & " "
    End If
Next i%
texto = texto & ")"
texto = texto & CRLF$ & Tabul$
If Val(getvar("history", "checkhistory0")) <> 0 Then
    texto = texto & "fixmdl=no" & CRLF$ & Tabul$
Else
    texto = texto & "fixmdl=yes" & CRLF$ & Tabul$
End If
If Val(getvar("history", "checkhistory1")) <> 0 Then
    texto = texto & "removels=yes" & CRLF$ & Tabul$
Else
    texto = texto & "removels=no" & CRLF$ & Tabul$
End If
If Val(getvar("history", "checkhistory2")) <> 0 Then
    texto = texto & "fixmissing=no" & CRLF$ & Tabul$
Else
    texto = texto & "fixmissing=yes" & CRLF$ & Tabul$
End If
Select Case Val(getvar("history", "refresh"))
    Case 0
        texto = texto & "refresh=yes" & CRLF$ & Tabul$
    Case 1

```

```

    texto = texto & "refresh=no" & CRLF$ & Tabul$
End Select
Select Case Val(getvar("history", "adjfst"))
    Case 0
        texto = texto & "adjfst=yes" & CRLF$ & Tabul$
    Case 1
        texto = texto & "adjfst=no" & CRLF$ & Tabul$
End Select
Select Case Val(getvar("history", "outlier"))
    Case 0 'keep
        texto = texto & "outlier=keep" & CRLF$ & Tabul$
    Case 1 'remove
        texto = texto & "outlier=remove" & CRLF$ & Tabul$
    Case 2 'auto
        texto = texto & "outlier=auto" & CRLF$ & Tabul$
End Select
texto = texto & "outlierwin=" & (getvar("history", "outlierwin"))
texto = texto & CRLF$ & Tabul$
For i% = 0 To 15
    If Val(getvar("history", "save" & i%)) <> 0 Then
        a$ = "true"
        Exit For
    End If
Next i%
If a$ = "true" Then
    texto = texto & "save=( "
    If Val(getvar("history", "save0")) <> 0 Then
        texto = texto & "rot "
    End If
    If Val(getvar("history", "save1")) <> 0 Then
        texto = texto & "sfh "
    End If
    If Val(getvar("history", "save2")) <> 0 Then
        texto = texto & "sar "
    End If
    If Val(getvar("history", "save3")) <> 0 Then
        texto = texto & "sae "
    End If
    If Val(getvar("history", "save4")) <> 0 Then
        texto = texto & "sfr "
    End If
    If Val(getvar("history", "save5")) <> 0 Then
        texto = texto & "sfe "
    End If
    If Val(getvar("history", "save6")) <> 0 Then
        texto = texto & "chr "
    End If
    If Val(getvar("history", "save7")) <> 0 Then
        texto = texto & "che "
    End If
    If Val(getvar("history", "save8")) <> 0 Then
        texto = texto & "trr "
    End If
    If Val(getvar("history", "save9")) <> 0 Then
        texto = texto & "tre "
    End If
    If Val(getvar("history", "save10")) <> 0 Then
        texto = texto & "lkh "
    End If
    If Val(getvar("history", "save11")) <> 0 Then
        texto = texto & "fce "
    End If
    If Val(getvar("history", "save12")) <> 0 Then
        texto = texto & "tcr "
    End If
    If Val(getvar("history", "save13")) <> 0 Then
        texto = texto & "tce "
    End If
    If Val(getvar("history", "save14")) <> 0 Then
        texto = texto & "psr "
    End If
    If Val(getvar("history", "save15")) <> 0 Then
        texto = texto & "pse "
    End If

```

```

    End If
    texto = texto & ")" & CRLF$ 'no tab
End If

texto = texto & ")" & CRLF$ & CRLF$

history_text = texto

End Function

Function identify_text$ ()
Dim texto$

texto = ""
texto = texto & "identify{" & CRLF$ & Tabul$
texto = texto & "diff=" & (getvar("identify", "text0"))
texto = texto & CRLF$ & Tabul$
texto = texto & "sdiff=" & (getvar("identify", "text1"))
texto = texto & CRLF$ & Tabul$
texto = texto & "maxlag=" & (getvar("identify", "text2"))
texto = texto & CRLF$ & Tabul$
texto = texto & "print=(acfplot, pacfplot)"
texto = texto & CRLF$ & ")" 'no tab
texto = texto & CRLF$ & CRLF$ 'no tab

identify_text = texto

End Function

Function outlier_Text$ ()
Dim texto$

texto = ""
texto = texto & "outlier{" & CRLF$ & Tabul$
Select Case Val(getvar("outlier", "types"))
    Case 0
        texto = texto & "types=ao"
        texto = texto & CRLF$ & Tabul$
    Case 1
        texto = texto & "types=ls"
        texto = texto & CRLF$ & Tabul$
    Case 2
        texto = texto & "types=all"
        texto = texto & CRLF$ & Tabul$
End Select
texto = texto & "critical=("
If Val(getvar("outlier", "types")) = 0 Then
    texto = texto & (getvar("outlier", "critical0"))
End If
If Val(getvar("outlier", "types")) = 1 Then
    texto = texto & (getvar("outlier", "critical1"))
End If
If Val(getvar("outlier", "types")) = 2 Then
    texto = texto & (getvar("outlier", "critical0")) & ","
    texto = texto & (getvar("outlier", "critical1"))
End If
texto = texto & ")" & CRLF$ & Tabul$
texto = texto & "method="
Select Case Val(getvar("outlier", "method"))
    Case 0
        texto = texto & "addone"
    Case 1
        texto = texto & "addall"
End Select
texto = texto & CRLF$ & Tabul$
texto = texto & "span=(" & (getvar("outlier", "span0")) & ","
texto = texto & (getvar("outlier", "span1")) & ")"
texto = texto & CRLF$ & Tabul$
texto = texto & "lsrun=" & (getvar("outlier", "textlsrun"))
texto = texto & CRLF$ & Tabul$
If Val(getvar("outlier", "iterations")) <> 0 Then
    texto = texto & "save=iterations" & CRLF$ & Tabul$
End If

```

```

texto = texto & "print=(all -tests)" & CRLF$ & Tabul$
texto = texto & CRLF$ 'no tab
texto = texto & ")" & CRLF$ & CRLF$ 'no tab

```

```

outlier_Text = texto

```

```

End Function

```

```

Function regadjust_Text$ ()

```

```

Dim texto$, i%, a$

```

```

texto = ""
texto = texto & "regadjust{" & CRLF$ & Tabul$
If Val(getvar("regadjust", "checkpriorvar")) <> 0 Then
    texto = texto & "prior=(("
    If Val(getvar("regadjust", "checkprior0")) <> 0 Then
        texto = texto & "td "
    End If
    If Val(getvar("regadjust", "checkprior1")) <> 0 Then
        texto = texto & "td6 "
    End If
    If Val(getvar("regadjust", "checkprior2")) <> 0 Then
        texto = texto & "tdstock "
    End If
    If Val(getvar("regadjust", "checkprior3")) <> 0 Then
        texto = texto & "easter "
    End If
    If Val(getvar("regadjust", "checkprior4")) <> 0 Then
        texto = texto & "labor "
    End If
    If Val(getvar("regadjust", "checkprior5")) <> 0 Then
        texto = texto & "thanks "
    End If
    If Val(getvar("regadjust", "checkprior6")) <> 0 Then
        texto = texto & "ao " 'mirar
    End If
    If Val(getvar("regadjust", "checkprior7")) <> 0 Then
        texto = texto & "ls " 'mirar
    End If
    If Val(getvar("regadjust", "checkprior8")) <> 0 Then
        texto = texto & "rp " 'mirar
    End If
    If Val(getvar("regadjust", "checkprior9")) <> 0 Then
        texto = texto & "user "
    End If
    texto = texto & ")" & CRLF$ & Tabul$
End If
If Val(getvar("regadjust", "checkfinalvar")) <> 0 Then
    texto = texto & "final=(("
    If Val(getvar("regadjust", "checkfinal0")) <> 0 Then
        texto = texto & "easter "
    End If
    If Val(getvar("regadjust", "checkfinal1")) <> 0 Then
        texto = texto & "labor "
    End If
    If Val(getvar("regadjust", "checkfinal2")) <> 0 Then
        texto = texto & "thanks "
    End If
    If Val(getvar("regadjust", "checkfinal3")) <> 0 Then
        texto = texto & "ao " 'mirar
    End If
    If Val(getvar("regadjust", "checkfinal4")) <> 0 Then
        texto = texto & "ls " 'mirar
    End If
    If Val(getvar("regadjust", "checkfinal5")) <> 0 Then
        texto = texto & "rp " 'mirar
    End If
    If Val(getvar("regadjust", "checkfinal6")) <> 0 Then
        texto = texto & "user "
    End If
    texto = texto & ")" & CRLF$ & Tabul$
End If

```

```

End Function

```

```

If Val(getvar("regadjust", "checkuser")) <> 0 Then
    texto = texto & "userreg=("
    If Val(getvar("regadjust", "optionuser0")) <> 0 Then
        texto = texto & (getvar("regadjust", "label8"))
    End If
    If Val(getvar("regadjust", "optionuser1")) <> 0 Then
        For i% = 0 To Val(getvar("regadjust", "maxuser")) - 1
            texto = texto & (getvar("regadjust", "listdifferent" & i%)) & " "
        Next i%
    End If
    texto = texto & ")" & CRLF$ & Tabul$
End If
texto = texto & "augmentusertd="
Select Case Val(getvar("regadjust", "augmentusertd"))
    Case 0
        texto = texto & "yes"
    Case 1
        texto = texto & "no"
End Select
texto = texto & CRLF$ & Tabul$
For i% = 0 To 5
    If Val(getvar("regadjust", "save" & i%)) <> 0 Then
        a = "true"
        Exit For
    End If
Next i%
If a = "true" Then
    texto = texto & "save=("
    If Val(getvar("regadjust", "save0")) <> 0 Then
        texto = texto & "aoutlier "
    End If
    If Val(getvar("regadjust", "save1")) <> 0 Then
        texto = texto & "levelshift "
    End If
    If Val(getvar("regadjust", "save2")) <> 0 Then
        texto = texto & "tradingday "
    End If
    If Val(getvar("regadjust", "save3")) <> 0 Then
        texto = texto & "holiday "
    End If
    If Val(getvar("regadjust", "save4")) <> 0 Then
        texto = texto & "userdef "
    End If
    If Val(getvar("regadjust", "save5")) <> 0 Then
        texto = texto & "outlieradjori "
    End If
    texto = texto & ")" & CRLF$'no tab
End If
texto = texto & ")" & CRLF$ & CRLF$

regadjust_Text = texto

```

**End Function**

**Function regression\_Text\$ ()**

**Dim** texto\$, i%, a\$

```

texto = ""
texto = texto & "regression{" & CRLF$ & Tabul$
For i% = 0 To 1
    If Val(getvar("regression", "checkframevar" & i%)) <> 0 Then
        a = "true"
        Exit For
    End If
Next i%
If a = "true" Then
    texto = texto & "variables=("
    If Val(getvar("regression", "checkframevar0")) <> 0 Then
        If Val(getvar("regression", "checkvar0")) <> 0 Then
            texto = texto & "const "
        End If
        If Val(getvar("regression", "checkvar1")) <> 0 Then
            texto = texto & "seasonal "
        End If
    End If
End If

```

```

End If
If Val(getvar("regression", "checkvar2")) <> 0 Then
    texto = texto & "sincos " & poner el valor
End If
If Val(getvar("regression", "checkvar3")) <> 0 Then
    texto = texto & "td "
End If
If Val(getvar("regression", "checkvar4")) <> 0 Then
    texto = texto & "td6 "
End If
If Val(getvar("regression", "checkvar5")) <> 0 Then
    texto = texto & "lom "
End If
If Val(getvar("regression", "checkvar6")) <> 0 Then
    texto = texto & "loq "
End If
End If
If Val(getvar("regression", "checkframevar1")) <> 0 Then
    If Val(getvar("regression", "checkvar7")) <> 0 Then
        texto = texto & "tdstock[" & (getvar("regression", "tdstock")) & "]"
    End If
    If Val(getvar("regression", "checkvar8")) <> 0 Then
        texto = texto & "easter[" & (getvar("regression", "easter")) & "]"
    End If
    If Val(getvar("regression", "checkvar9")) <> 0 Then
        texto = texto & "labor[" & (getvar("regression", "labor")) & "]"
    End If
    If Val(getvar("regression", "checkvar10")) <> 0 Then
        texto = texto & "thank[" & (getvar("regression", "thank")) & "]"
    End If
    If Val(getvar("regression", "checkvar11")) <> 0 Then
        For i% = 0 To Val(getvar("regression", "maxao"))
            texto = texto & "ao" & (getvar("regression", "ao" & i%)) & " "
        Next i%
    End If
    If Val(getvar("regression", "checkvar12")) <> 0 Then
        For i% = 0 To Val(getvar("regression", "maxls"))
            texto = texto & "ls" & (getvar("regression", "ls" & i%)) & " "
        Next i%
    End If
    If Val(getvar("regression", "checkvar13")) <> 0 Then
        For i% = 0 To Val(getvar("regression", "maxrp"))
            texto = texto & "rp" & (getvar("regression", "rp" & i%)) & " "
        Next i%
    End If
    If Val(getvar("regression", "checkvar14")) <> 0 Then
        texto = texto & "lpyear "
    End If
End If
texto = texto & ")" & CRLF$ & Tabul$
End If
If Val(getvar("regression", "checkuservar")) <> 0 Then
    texto = texto & "user=("
    For i% = 0 To Val(getvar("regression", "maxuser"))
        texto = texto & (getvar("regression", "listuser" & i%)) & " "
    Next i%
    texto = texto & ")" & CRLF$ & Tabul$
    texto = texto & "start=" & (getvar("regression", "start"))
    texto = texto & CRLF$ & Tabul$
    texto = texto & "file=" & (getvar("regression", "file")) & ""
    texto = texto & CRLF$ & Tabul$
    Select Case Val(getvar("regression", "comboformat"))
        Case 1
            texto = texto & "format=("
            texto = texto & (getvar("regression", "textformat")) & ")"
            texto = texto & CRLF$ & Tabul$
        Case 3
            texto = texto & "format=("
            texto = texto & "x12save" & ")"
            texto = texto & CRLF$ & Tabul$
        Case 2
            texto = texto & "format=("
            texto = texto & "edit" & ")"
    End Select
End If

```

```

    texto = texto & CRLF$ & Tabul$
End Select
End If
If Val(getvar("regression", "checkaicstest")) <> 0 Then
    texto = texto & "aicstest="
    Select Case Val(getvar("regression", "comboaicstest"))
    Case 0
        texto = texto & "td"
    Case 1
        texto = texto & "td6"
    Case 2
        If Val(getvar("regression", "checkvar7")) <> 0 Then
            texto = texto & "tdstock[" & (getvar("regression", "tdstock")) & "]"
        End If
    End Select
    texto = texto & CRLF$ & Tabul$

'quitar la línea entera
texto = texto & "print=(all)" & CRLF$ 'aictd

End If
If Val(getvar("regression", "regressionmatrix")) <> 0 Then
    texto = texto & "save=regressionmatrix" & CRLF$ 'no tab
End If
texto = texto & "}" & CRLF$ & CRLF$ 'no tab

regression_Text = texto

End Function

Function series_text$ ()
Dim texto$, i%, a$

    texto = ""
    texto = texto & "series{" & CRLF$ & Tabul$
    texto = texto & "start=" & getvar("series", "start")
    texto = texto & CRLF$ & Tabul$
    If Val(getvar("series", "checkspan")) <> 0 Then
        texto = texto & "span=(" & (getvar("series", "textspan0")) & "," & (getvar("series", "textspan1")) & ")"
        texto = texto & CRLF$ & Tabul$
    End If
    texto = texto & "period="
    Select Case Val(getvar("series", "period"))
    Case 0
        texto = texto & "4"
    Case 1
        texto = texto & "12"
    End Select
    texto = texto & CRLF$ & Tabul$
    If (getvar("series", "namew")) <> "" Then
        texto = texto & "name="
        texto = texto & (getvar("series", "namew")) & ""
        texto = texto & CRLF$ & Tabul$
    End If
    If (getvar("series", "file")) <> "" Then
        texto = texto & "file=" & (getvar("series", "file")) & ""
        texto = texto & CRLF$ & Tabul$
    End If
    Select Case Val(getvar("series", "comboformat"))
    Case 1
        texto = texto & "format=("
        texto = texto & (getvar("series", "textformat")) & ")"
        texto = texto & CRLF$ & Tabul$
    Case 2
        texto = texto & "format=(1r)"
        texto = texto & CRLF$ & Tabul$
    Case 3
        texto = texto & "format=(2r)"
        texto = texto & CRLF$ & Tabul$
    Case 4
        texto = texto & "format=(1l)"
        texto = texto & CRLF$ & Tabul$
    Case 5

```

```

    texto = texto & "format=(2l)"
    texto = texto & CRLF$ & Tabul$
Case 6
    texto = texto & "format=(cs)"
    texto = texto & CRLF$ & Tabul$
Case 7
    texto = texto & "format=("
    texto = texto & "edit" & ")"
    texto = texto & CRLF$ & Tabul$
Case 8
    texto = texto & "format=(x12save)"
    texto = texto & CRLF$ & Tabul$
End Select
'mirar el name con lo de title$
texto = texto & "decimals=" & (getvar("series", "textseries1"))
texto = texto & CRLF$ & Tabul$
texto = texto & "precision=" & (getvar("series", "textSeries0"))
texto = texto & CRLF$ & Tabul$
If Val(getvar("series", "composite")) <> 0 Then
    texto = texto & "comptype="
    Select Case (getvar("series", "comptype"))
        Case 0
            texto = texto & "add"
        Case 1
            texto = texto & "mult"
        Case 2
            texto = texto & "sub"
        Case 3
            texto = texto & "div"
    End Select
    texto = texto & CRLF$ & Tabul$
    texto = texto & "compwt=" & (getvar("series", "Compwt"))
    texto = texto & CRLF$ & Tabul$
End If
If Val(getvar("series", "Checkmodelspace")) <> 0 Then
    texto = texto & "modelspace=" & (getvar("series", "textmodelspace0")) & "," & (getvar("series", "textmodelspace1")) & ")"
    texto = texto & CRLF$ & Tabul$
End If
If (getvar("series", "Spectrumstart")) <> "" Then
    texto = texto & "spectrumstart=" & (getvar("series", "Spectrumstart"))
    texto = texto & CRLF$ & Tabul$
End If
texto = texto & "spectrumtype="
Select Case Val(getvar("series", "spectrumtype"))
    Case 0
        texto = texto & "periodogram"
    Case 1
        texto = texto & "arspec"
End Select
texto = texto & CRLF$ & Tabul$
texto = texto & "difspectrum="
Select Case Val(getvar("series", "difspectrum"))
    Case Is <> 0
        texto = texto & "yes"
    Case 0
        texto = texto & "no"
End Select
texto = texto & CRLF$ & Tabul$
texto = texto & "missingcode=" & (getvar("series", "missingcode"))
texto = texto & CRLF$ & Tabul$
texto = texto & "missingval=" & (getvar("series", "missingval"))
texto = texto & CRLF$ & Tabul$
texto = texto & "saveprecision=" & (getvar("series", "textseries2"))
texto = texto & CRLF$ & Tabul$
For i = 0 To 1
    If Val(getvar("series", "save" & i%)) <> 0 Then 'mirar!!!
        a = "True"
    Exit For
End If
Next i%
If a = "True" Then
    texto = texto & "save="
    If Val(getvar("series", "save0")) <> 0 Then

```



```

        texto = texto & "span "
    End If
    If Val(getvar("series", "save1")) <> 0 Then
        texto = texto & "missingvaladj"
    End If
    texto = texto & ")" & CRLF$ & CRLF$ & Tabul$
End If
texto = texto & "print=header"
texto = texto & CRLF$ 'no tab
texto = texto & "}" & CRLF$ & CRLF$ 'no tab

series_text = texto

End Function

Function slidingspans_text$ ()
Dim texto$, i%, a$

    texto = ""
    texto = texto & "slidingspans{"
    texto = texto & CRLF$ & Tabul$
    If (getvar("sliding", "start")) <> "" Then
        texto = texto & "start=" & (getvar("sliding", "start"))
        texto = texto & CRLF$ & Tabul$
    End If
    If (getvar("sliding", "length")) <> "" Then
        texto = texto & "length=" & (getvar("sliding", "length"))
        texto = texto & CRLF$ & Tabul$
    End If
    texto = texto & "cutseas=" & (getvar("sliding", "cutseas"))
    texto = texto & CRLF$ & Tabul$
    texto = texto & "cutchg=" & (getvar("sliding", "cutchg"))
    texto = texto & CRLF$ & Tabul$
    texto = texto & "cuttd=" & (getvar("sliding", "cuttd"))
    texto = texto & CRLF$ & Tabul$
    texto = texto & "fixmissing="
    Select Case Val(getvar("sliding", "fixmissing"))
        Case 0
            texto = texto & "no"
        Case 1
            texto = texto & "yes"
    End Select
    texto = texto & CRLF$ & Tabul$
    Select Case Val(getvar("sliding", "outlier"))
        Case 1
            texto = texto & "outlier=yes"
            texto = texto & CRLF$ & Tabul$
        Case 2
            texto = texto & "outlier=keep"
            texto = texto & CRLF$ & Tabul$
    End Select
    texto = texto & "fixmdl="
    Select Case Val(getvar("sliding", "fixmdl"))
        Case 0
            texto = texto & "yes"
        Case 1
            texto = texto & "no"
        Case 2
            texto = texto & "clear"
    End Select
    texto = texto & CRLF$ & Tabul$
    For i% = 0 To 8
        If Val(getvar("sliding", "save" & i%)) <> 0 Then
            a$ = "true"
            Exit For
        End If
    Next i%
    If a$ = "true" Then
        texto = texto & "save=("
        If Val(getvar("sliding", "save0")) <> 0 Then
            texto = texto & "sfspan "
        End If
        If Val(getvar("sliding", "save1")) <> 0 Then

```

```

    texto = texto & "chspan "
End If
If Val(getvar("sliding", "save2")) <> 0 Then
    texto = texto & "saspan "
End If
If Val(getvar("sliding", "save3")) <> 0 Then
    texto = texto & "ycspan "
End If
If Val(getvar("sliding", "save4")) <> 0 Then
    texto = texto & "tdspan "
End If
If Val(getvar("sliding", "save5")) <> 0 Then
    texto = texto & "sfspanind "
End If
If Val(getvar("sliding", "save6")) <> 0 Then
    texto = texto & "chspanind "
End If
If Val(getvar("sliding", "save7")) <> 0 Then
    texto = texto & "saspanind "
End If
If Val(getvar("sliding", "save8")) <> 0 Then
    texto = texto & "ycspanind "
End If
texto = texto & ")" & CRLF$ 'no Tabul$
End If
texto = texto & "}" & CRLF$ & CRLF$

```

```
slidingspans_text = texto
```

**End Function**

**Function transform\_text\$ ()**

**Dim** texto\$, i%, a\$

```

texto = ""
texto = texto & "transform{" & CRLF$ & Tabul$
If Val(getvar("transform", "checktransform1")) <> 0 Then
    texto = texto & "function="
    Select Case Val(getvar("transform", "function"))
        Case 0
            texto = texto & "none"
        Case 1
            texto = texto & "log"
        Case 2
            texto = texto & "sqrt"
        Case 3
            texto = texto & "inverse"
        Case 4
            texto = texto & "logistic"
    End Select
    texto = texto & CRLF$ & Tabul$
End If
If Val(getvar("transform", "checktransform2")) <> 0 Then
    texto = texto & "power=" & (getvar("transform", "power"))
    texto = texto & CRLF$ & Tabul$
End If
If Val(getvar("transform", "checktransform3")) <> 0 Then
    texto = texto & "adjust="
    Select Case Val(getvar("transform", "adjust"))
        Case 0
            texto = texto & "lom"
        Case 1
            texto = texto & "loq"
        Case 2
            texto = texto & "none"
    End Select
    texto = texto & CRLF$ & Tabul$
End If
If Val(getvar("transform", "checktransform0")) <> 0 Then
    texto = texto & "start=" & (getvar("transform", "start"))
    texto = texto & CRLF$ & Tabul$
    texto = texto & "file="
    texto = texto & (getvar("transform", "file")) & ""

```

```

texto = texto & CRLF$ & Tabul$
Select Case Val(getvar("transform", "comboformat"))
Case 1
    texto = texto & "format=("
    texto = texto & (getvar("transform", "texttransform")) & ")"
    texto = texto & CRLF$ & Tabul$
Case 2, 3, 4, 5, 6, 8
    texto = texto & "format=("
    texto = texto & Val(getvar("transform", "comboformat" & Val(getvar("transform", "comboformat")))) & ")"
    texto = texto & CRLF$ & Tabul$
Case 7
    texto = texto & "format=("
    texto = texto & "edit" & ")"
    texto = texto & CRLF$ & Tabul$
End Select
If (getvar("transform", "namew")) <> "" Then
    texto = texto & "name=" & (getvar("transform", "namew"))
    texto = texto & CRLF$ & Tabul$
End If
texto = texto & "precision=" & (getvar("transform", "textprecision"))
texto = texto & CRLF$ & Tabul$
texto = texto & "mode="
Select Case Val(getvar("transform", "mode"))
Case 0
    texto = texto & "percent"
Case 1
    texto = texto & "ratio"
Case 2
    texto = texto & "diff"
End Select
texto = texto & CRLF$ & Tabul$
texto = texto & "apply="
Select Case Val(getvar("transform", "apply"))
Case 0
    texto = texto & "model"
Case 1
    texto = texto & "sadj"
Case 2
    texto = texto & "both"
End Select
texto = texto & CRLF$ & Tabul$
End If
If Val(getvar("transform", "checktransform4")) <> 0 Then
    texto = texto & "trendadjma=" & (getvar("transform", "trendadjma"))
    texto = texto & CRLF$ & Tabul$
End If
For i% = 0 To 3
    If Val(getvar("transform", "save" & i%)) <> 0 Then
        a = "true"
        Exit For
    End If
Next i%
If a = "true" Then
    texto = texto & "save=("
    If Val(getvar("transform", "save0")) <> 0 Then
        texto = texto & "priorfactors "
    End If
    If Val(getvar("transform", "save1")) <> 0 Then
        texto = texto & "prioradjusted "
    End If
    If Val(getvar("transform", "save2")) <> 0 Then
        texto = texto & "transformed "
    End If
    If Val(getvar("transform", "save3")) <> 0 Then
        texto = texto & "prioradjtrend "
    End If
    texto = texto & ")" & CRLF$ 'no tab
End If
texto = texto & "}" & CRLF$ & CRLF$ 'no tab

transform_text = texto

End Function

```

```

Function x11_text$ ()
Dim texto$, i%, a$

texto = ""
texto = texto & "x11{" & CRLF$ & Tabul$
texto = texto & "mode="
Select Case Val(getvar("x11", "mode"))
Case 0
    texto = texto & "mult"
Case 1
    texto = texto & "add"
Case 2
    texto = texto & "pseudoadd"
Case 3
    texto = texto & "logadd"
End Select
texto = texto & CRLF$ & Tabul$
texto = texto & "seasonalma="
If Val(getvar("x11", "seasonalma0")) <> 0 Then
    texto = texto & "msr"
End If
If Val(getvar("x11", "seasonalma1")) <> 0 Then 'n
    Select Case periodicidad$
    Case "4"
        texto = texto & "("
        For i% = 12 To 15
            texto = texto & "s" & (getvar("x11", "textseasonalma" & i%)) & " "
        Next i%
        texto = texto & ")"
    Case "12"
        texto = texto & "("
        For i% = 0 To 11
            texto = texto & "s" & (getvar("x11", "textseasonalma" & i%)) & " "
        Next i%
        texto = texto & ")"
    End Select
End If
If Val(getvar("x11", "seasonalma2")) <> 0 Then
    Select Case Val(getvar("x11", "seasonalma"))
    Case 0
        texto = texto & "s3x3"
    Case 1
        texto = texto & "s3x5"
    Case 2
        texto = texto & "s3x9"
    Case 3
        texto = texto & "s3x15"
    Case 4
        texto = texto & "stable"
    Case 5
        texto = texto & "x11default"
    End Select
End If
texto = texto & CRLF$ & Tabul$
If Val(getvar("x11", "checktrendma")) <> 0 Then
    texto = texto & "trendma="
    texto = texto & (getvar("x11", "texttrendma"))
    texto = texto & CRLF$ & Tabul$
End If
texto = texto & "sigmalim=("
texto = texto & (getvar("x11", "sigmalim0")) & "," & (getvar("x11", "sigmalim1")) & ")"
texto = texto & CRLF$ & Tabul$
If (getvar("x11", "title")) <> "" Then
    texto = texto & "title=" & (getvar("x11", "title")) & ""
    texto = texto & CRLF$ & Tabul$
End If
If Val(getvar("x11", "checkx11")) <> 0 Then
    texto = texto & "td="
    Select Case Val(getvar("x11", "combox11"))
    Case 0
        texto = texto & "apply"
    Case 1

```

```

    texto = texto & "sigf"
Case 2
    texto = texto & "noapply"
Case 3
    texto = texto & "prior"
Case 4
    texto = texto & "priorsigf"
End Select
texto = texto & CRLF$ & Tabul$
If (getvar("x11", "tdstart")) <> "" Then
    texto = texto & "tdstart=" & (getvar("x11", "tdstart"))
    texto = texto & CRLF$ & Tabul$
End If
If (getvar("x11", "tdapply")) <> "" Then
    texto = texto & "tdapply=" & (getvar("x11", "tdapply"))
    texto = texto & CRLF$ & Tabul$
End If
texto = texto & "tdexclude=" & (getvar("x11", "tdexclude"))
texto = texto & CRLF$ & Tabul$
texto = texto & "tdprior=("
texto = texto & (getvar("x11", "tdjprior0")) & " "
texto = texto & (getvar("x11", "tdjprior1")) & " "
texto = texto & (getvar("x11", "tdjprior2")) & " "
texto = texto & (getvar("x11", "tdjprior3")) & " "
texto = texto & (getvar("x11", "tdjprior4")) & " "
texto = texto & (getvar("x11", "tdjprior5")) & " "
texto = texto & (getvar("x11", "tdjprior6"))
texto = texto & ")" & CRLF$ & Tabul$
If Val(getvar("x11", "checklom")) < 0 Then
    texto = texto & "lom="
    Select Case Val(getvar("x11", "combolom"))
    Case 0
        texto = texto & "td"
    Case 1
        texto = texto & "seas"
    End Select
    texto = texto & CRLF$ & Tabul$
End If
End If
'mirar lo de trading day a ver si al poner start td
'y no poner trading day adjustment da error o no hace
'nada. Mirarlo con el x12, ejecutándolo
For i% = 0 To 4
    If Val(getvar("x11", "x11holiday" & i%)) < 0 Then
        a = "true"
    Exit For
End If
Next i%
If a = "true" Then
    texto = texto & "x11holiday=("
    If Val(getvar("x11", "x11holiday0")) < 0 Then
        texto = texto & "easter "
    End If
    If Val(getvar("x11", "x11holiday1")) < 0 Then
        texto = texto & "labor "
    End If
    If Val(getvar("x11", "x11holiday2")) < 0 Then
        texto = texto & "laborsigf "
    End If
    If Val(getvar("x11", "x11holiday3")) < 0 Then
        texto = texto & "thank "
    End If
    If Val(getvar("x11", "x11holiday4")) < 0 Then
        texto = texto & "thanksigf "
    End If
    texto = texto & ")" & CRLF$ & Tabul$
End If
Select Case Val(getvar("x11", "final"))
Case 0
    texto = texto & "final=prior" & CRLF$ & Tabul$
Case 1
    texto = texto & "final=holiday" & CRLF$ & Tabul$
End Select

```

```

'force
'forcestart
If Val(getvar("x11", "checktrendic")) <> 0 Then
    texto = texto & "trendic=" & (getvar("x11", "texttrendic"))
    texto = texto & CRLF$ & Tabul$
End If
texto = texto & "itrendma=" & (getvar("x11", "itrendma"))
texto = texto & CRLF$ & Tabul$
Select Case Val(getvar("x11", "extremeadj"))
    Case 1
        texto = texto & "extremeadj=wmad" & CRLF$ & Tabul$
    Case 2
        texto = texto & "extremeadj=wmadlog" & CRLF$ & Tabul$
End Select
Select Case Val(getvar("x11", "calendarsigma"))
    Case 0 'default
    Case 1
        texto = texto & "calendarsigma=all" & CRLF$ & Tabul$
    Case 2
        texto = texto & "calendarsigma=signif" & CRLF$ & Tabul$
    Case 3
        texto = texto & "calendarsigma=select" & CRLF$ & Tabul$
        If (getvar("x11", "sigmavec")) <> "" Then
            texto = texto & "sigmavec=(" & (getvar("x11", "sigmavec")) & ")"
            texto = texto & CRLF$ & Tabul$
        End If
    End Select
texto = texto & "type="
Select Case Val(getvar("x11", "type"))
    Case Is <> 0
        texto = texto & "sa"
    Case 0
        texto = texto & "sumry"
End Select
texto = texto & CRLF$ & Tabul$
If (getvar("x11", "textdmaxlead")) <> "" Then
    texto = texto & "tdmaxlead=" & (getvar("x11", "textdmaxlead"))
    texto = texto & CRLF$ & Tabul$
End If
texto = texto & "taper=" & (getvar("x11", "taper")) & CRLF$ & Tabul$
texto = texto & "shortsf="
Select Case Val(getvar("x11", "shortsf"))
    Case 0
        texto = texto & "no"
    Case 1
        texto = texto & "yes"
End Select
texto = texto & CRLF$ & Tabul$
texto = texto & "strike="
Select Case Val(getvar("x11", "strike"))
    Case Is <> 0
        texto = texto & "yes"
    Case 0
        texto = texto & "no"
End Select
texto = texto & CRLF$ & Tabul$
For i% = 0 To 60
    If Val(getvar("x11", "checkx11" & i%)) <> 0 Then
        a = "true"
        Exit For
    End If
Next i%
If a = "true" Then
    texto = texto & "save=("
    If Val(getvar("x11", "checkx110")) <> 0 Then
        texto = texto & "h1 "
    End If
    If Val(getvar("x11", "checkx111")) <> 0 Then
        texto = texto & "a4 "
    End If
    If Val(getvar("x11", "checkx112")) <> 0 Then
        texto = texto & "b1 "
    End If
End If

```

```

If Val(getvar("x11", "checkx113")) <> 0 Then
    texto = texto & "c16 "
End If
If Val(getvar("x11", "checkx114")) <> 0 Then
    texto = texto & "c17 "
End If
If Val(getvar("x11", "checkx115")) <> 0 Then
    texto = texto & "c18 "
End If
If Val(getvar("x11", "checkx116")) <> 0 Then
    texto = texto & "d8 "
End If
If Val(getvar("x11", "checkx117")) <> 0 Then
    texto = texto & "d9 "
End If
If Val(getvar("x11", "checkx118")) <> 0 Then
    texto = texto & "d10 "
End If
If Val(getvar("x11", "checkx119")) <> 0 Then
    texto = texto & "fsd "
End If
If Val(getvar("x11", "checkx1110")) <> 0 Then
    texto = texto & "d11 "
End If
If Val(getvar("x11", "checkx1111")) <> 0 Then
    texto = texto & "saa "
End If
If Val(getvar("x11", "checkx1112")) <> 0 Then
    texto = texto & "rnd "
End If
If Val(getvar("x11", "checkx1113")) <> 0 Then
    texto = texto & "d12 "
End If
If Val(getvar("x11", "checkx1114")) <> 0 Then
    texto = texto & "d13 "
End If
If Val(getvar("x11", "checkx1115")) <> 0 Then
    texto = texto & "d16 "
End If
If Val(getvar("x11", "checkx1116")) <> 0 Then
    texto = texto & "fad "
End If
If Val(getvar("x11", "checkx1117")) <> 0 Then
    texto = texto & "e4 "
End If
If Val(getvar("x11", "checkx1118")) <> 0 Then
    texto = texto & "e5 "
End If
If Val(getvar("x11", "checkx1119")) <> 0 Then
    texto = texto & "e6 "
End If
If Val(getvar("x11", "checkx1120")) <> 0 Then
    texto = texto & "e6a "
End If
If Val(getvar("x11", "checkx1121")) <> 0 Then
    texto = texto & "e6r "
End If
If Val(getvar("x11", "checkx1122")) <> 0 Then
    texto = texto & "e7 "
End If
If Val(getvar("x11", "checkx1123")) <> 0 Then
    texto = texto & "b2 "
End If
If Val(getvar("x11", "checkx1124")) <> 0 Then
    texto = texto & "b3 "
End If
If Val(getvar("x11", "checkx1125")) <> 0 Then
    texto = texto & "b5 "
End If
If Val(getvar("x11", "checkx1126")) <> 0 Then
    texto = texto & "b6 "
End If
If Val(getvar("x11", "checkx1127")) <> 0 Then

```

```

    texto = texto & "b7 "
End If
If Val(getvar("x11", "checkx1128")) <> 0 Then
    texto = texto & "b8 "
End If
If Val(getvar("x11", "checkx1129")) <> 0 Then
    texto = texto & "b10 "
End If
If Val(getvar("x11", "checkx1130")) <> 0 Then
    texto = texto & "b11 "
End If
If Val(getvar("x11", "checkx1131")) <> 0 Then
    texto = texto & "b13 "
End If
If Val(getvar("x11", "checkx1132")) <> 0 Then
    texto = texto & "b16 "
End If
If Val(getvar("x11", "checkx1133")) <> 0 Then
    texto = texto & "b17 "
End If
If Val(getvar("x11", "checkx1134")) <> 0 Then
    texto = texto & "b18 "
End If
If Val(getvar("x11", "checkx1135")) <> 0 Then
    texto = texto & "b19 "
End If
If Val(getvar("x11", "checkx1136")) <> 0 Then
    texto = texto & "b20 "
End If
If Val(getvar("x11", "checkx1137")) <> 0 Then
    texto = texto & "c1 "
End If
If Val(getvar("x11", "checkx1138")) <> 0 Then
    texto = texto & "c2 "
End If
If Val(getvar("x11", "checkx1139")) <> 0 Then
    texto = texto & "c4 "
End If
If Val(getvar("x11", "checkx1140")) <> 0 Then
    texto = texto & "c5 "
End If
If Val(getvar("x11", "checkx1141")) <> 0 Then
    texto = texto & "c6 "
End If
If Val(getvar("x11", "checkx1142")) <> 0 Then
    texto = texto & "c7 "
End If
If Val(getvar("x11", "checkx1143")) <> 0 Then
    texto = texto & "c9 "
End If
If Val(getvar("x11", "checkx1144")) <> 0 Then
    texto = texto & "c10 "
End If
If Val(getvar("x11", "checkx1145")) <> 0 Then
    texto = texto & "c11 "
End If
If Val(getvar("x11", "checkx1146")) <> 0 Then
    texto = texto & "c13 "
End If
If Val(getvar("x11", "checkx1147")) <> 0 Then
    texto = texto & "c19 "
End If
If Val(getvar("x11", "checkx1148")) <> 0 Then
    texto = texto & "c20 "
End If
If Val(getvar("x11", "checkx1149")) <> 0 Then
    texto = texto & "d1 "
End If
If Val(getvar("x11", "checkx1150")) <> 0 Then
    texto = texto & "d2 "
End If
If Val(getvar("x11", "checkx1151")) <> 0 Then
    texto = texto & "d4 "

```



```

End If
If Val(getvar("x11", "checkx1152")) <> 0 Then
    texto = texto & "d5 "
End If
If Val(getvar("x11", "checkx1153")) <> 0 Then
    texto = texto & "d6 "
End If
If Val(getvar("x11", "checkx1154")) <> 0 Then
    texto = texto & "d7 "
End If
If Val(getvar("x11", "checkx1155")) <> 0 Then
    texto = texto & "tal "
End If
If Val(getvar("x11", "checkx1156")) <> 0 Then
    texto = texto & "iao "
End If
If Val(getvar("x11", "checkx1157")) <> 0 Then
    texto = texto & "e1 "
End If
If Val(getvar("x11", "checkx1158")) <> 0 Then
    texto = texto & "e2 "
End If
If Val(getvar("x11", "checkx1159")) <> 0 Then
    texto = texto & "e3 "
End If
If Val(getvar("x11", "checkx1160")) <> 0 Then
    texto = texto & "e11 "
End If
If Val(getvar("x11", "checkx1161")) <> 0 Then
    texto = texto & "f1 "
End If
texto = texto & ")" & CRLF$ & Tabul$
End If
texto = texto & "appendfcst="
Select Case Val(getvar("x11", "appendfcst"))
    Case Is <> 0
        texto = texto & "yes"
    Case 0
        texto = texto & "no"
End Select
texto = texto & CRLF$ & Tabul$
texto = texto & "print=(f1esthol, extremetd,tdreg,f1estd8,movseasrat,"
texto = texto & "residualseasf,x11diag,qstat,tdaytype,specsa,specirr,f1estb1)"
texto = texto & ",replacsib4,replacsib9,extremetdb,tdregb15,autosf)"
texto = texto & CRLF$ 'no tab
texto = texto & "}" & CRLF$ & CRLF$ 'no tab

x11_text = texto

```

**End Function**

## **1.2.4. Run.bas**

**Option Explicit**  
**Global runmode%**

```
Sub configur_0 ()
Dim x%, auxname$

formx12.Show
menuprincipal.Hide
'activar series
Call setvar("series", "cargar", "yes")
Call setvar("formx12", "arguments0", True)
formx12.SSIndexTabParametros.TabEnabled(0) = True
auxname$ = menuprincipal.List.List(0)
Call setvar("series", "file", auxname)
auxname$ = (getvar("series", "file"))
Call setvar("series", "name", series_name(CStr(auxname)))
series.LabelSeriesFile.Caption = menuprincipal.List.List(0)
series.LabelSeriesName.Caption = series_name(CStr(series.LabelSeriesFile.Caption))
```

**End Sub**

**Sub configur\_2 ()**  
**Dim x%, auxfile\$**

```
'new spec file
X12IniFile$ = app.Path & "\output\x12conf.dat"
If Dir$(X12IniFile$) <> "" Then
Kill X12IniFile$
End If

Call titleform

'desactivar todos los arguments
For x% = 0 To 14
formx12.SSIndexTabParametros.TabEnabled(x%) = False
Call setvar("formx12", "arguments" & x%, False)
Next x%
```

```
For x% = 1 To 15
checkcargar(x%) = "no"
Next x%
Call setvar("series", "cargar", checkcargar(1))
Call setvar("composite", "cargar", checkcargar(2))
Call setvar("transform", "cargar", checkcargar(3))
Call setvar("x11", "cargar", checkcargar(4))
Call setvar("identify", "cargar", checkcargar(5))
Call setvar("regression", "cargar", checkcargar(6))
Call setvar("arima", "cargar", checkcargar(7))
Call setvar("automdl", "cargar", checkcargar(8))
Call setvar("estimate", "cargar", checkcargar(9))
Call setvar("outlier", "cargar", checkcargar(10))
Call setvar("check", "cargar", checkcargar(11))
Call setvar("forecast", "cargar", checkcargar(12))
Call setvar("regadjust", "cargar", checkcargar(13))
Call setvar("sliding", "cargar", checkcargar(14))
Call setvar("history", "cargar", checkcargar(15))
```

**Call inicializar\_series**

**Call inicializar**

```
Call inicializar_composite
Call inicializar_transform
Call inicializar_x11
Call inicializar_identify
Call inicializar_regression
Call inicializar_arima
Call inicializar_automdl
Call inicializar_estimate
Call inicializar_outlier
Call inicializar_check
```

```

Call inicializar_forecast
Call inicializar_regadjust
Call inicializar_sliding
Call inicializar_history

'fin new spec file
formx12.Show
menuprincipal.Hide
'activar series
Call setvar("series", "cargar", "yes")
Call setvar("formx12", "arguments0", True)
formx12.SSIndexTabParametros.TabEnabled(0) = True
auxfile$ = menuprincipal.List.List(menuprincipal.List.ListCount - 1)
Call setvar("series", "file", auxfile$)
'no se si alguna vez estará vacío, en principio nunca estará
'vacío este apartado porque se le llama desde la lista cuando
'añade algún elemento, por eso siempre habrá algo, pero por si acaso
Call setvar("series", "name", series_name(CStr((getvar("series", "file")))))

```

End Sub

Sub configur\_2a ()

Dim x%, auxfile\$

```

'new spec file
X12IniFile$ = app.Path & "\output\x12conf.dat"
If Dir$(X12IniFile$) <> "" Then
    Kill X12IniFile$
End If

Call titleform

'desactivar todos los arguments
For x% = 0 To 14
    'formx12.SSIndexTabParametros.TabEnabled(x%) = False
    Call setvar("formx12", "arguments" & x%, False)
Next x%
For x% = 1 To 15
    checkcargar(x%) = "no"
Next x%
Call setvar("series", "cargar", checkcargar(1))
Call setvar("composite", "cargar", checkcargar(2))
Call setvar("transform", "cargar", checkcargar(3))
Call setvar("x11", "cargar", checkcargar(4))
Call setvar("identify", "cargar", checkcargar(5))
Call setvar("regression", "cargar", checkcargar(6))
Call setvar("arima", "cargar", checkcargar(7))
Call setvar("automdl", "cargar", checkcargar(8))
Call setvar("estimate", "cargar", checkcargar(9))
Call setvar("outlier", "cargar", checkcargar(10))
Call setvar("check", "cargar", checkcargar(11))
Call setvar("forecast", "cargar", checkcargar(12))
Call setvar("regadjust", "cargar", checkcargar(13))
Call setvar("sliding", "cargar", checkcargar(14))
Call setvar("history", "cargar", checkcargar(15))

```

Call inicializar\_series

Call inicializar

```

Call inicializar_composite
Call inicializar_transform
Call inicializar_x11
Call inicializar_identify
Call inicializar_regression
Call inicializar_arima
Call inicializar_automdl
Call inicializar_estimate
Call inicializar_outlier
Call inicializar_check
Call inicializar_forecast
Call inicializar_regadjust

```

```
Call inicializar_sliding
Call inicializar_history
```

```
'fin new spec file
```

```
'MIRAR DE HACERLO SIN QUE SE HAGA NEW SPEC FILE
```

```
auxfile$ = ""
For x% = 0 To menuprincipal.List.ListCount - 1
  If menuprincipal.List.Selected(x%) = True Then
    auxfile$ = menuprincipal.List.List(x%)
  Exit For
End If
Next x%
If auxfile$ = "" Then
  response = MsgBox("Non of the series were selected", 48, title)
  Exit Sub
Else
  formx12.Show
  menuprincipal.Hide
  'activar series
  Call setvar("series", "cargar", "yes")
  Call setvar("formx12", "arguments0", True)
  formx12.SSIndexTabParametros.TabEnabled(0) = True
  Call setvar("series", "file", auxfile$)
  'no se si alguna vez estará vacío, en principio nunca estará
  'vacío este apartado porque se le llama desde la lista cuando
  'añade algún elemento, por eso siempre habrá algo, pero por si acaso
  Call setvar("series", "name", series_name(CStr(getvar("series", "file"))))
End If
```

```
End Sub
```

```
Sub configur_3 ()
```

```
Dim x%, auxfile$
```

```
'new spec file
X12IniFile$ = app.Path & "\output\x12conf.dat"
If Dir$(X12IniFile$) <> "" Then
  Kill X12IniFile$
End If
```

```
Call titleform
```

```
'desactivar todos los arguments
For x% = 0 To 14
  'formx12.SSIndexTabParametros.TabEnabled(x%) = False
  Call setvar("formx12", "arguments" & x%, False)
Next x%
```

```
For x% = 1 To 15
  checkcargar(x%) = "no"
Next x%
Call setvar("series", "cargar", checkcargar(1))
Call setvar("composite", "cargar", checkcargar(2))
Call setvar("transform", "cargar", checkcargar(3))
Call setvar("x11", "cargar", checkcargar(4))
Call setvar("identify", "cargar", checkcargar(5))
Call setvar("regression", "cargar", checkcargar(6))
Call setvar("arima", "cargar", checkcargar(7))
Call setvar("automdl", "cargar", checkcargar(8))
Call setvar("estimate", "cargar", checkcargar(9))
Call setvar("outlier", "cargar", checkcargar(10))
Call setvar("check", "cargar", checkcargar(11))
Call setvar("forecast", "cargar", checkcargar(12))
Call setvar("regadjust", "cargar", checkcargar(13))
Call setvar("sliding", "cargar", checkcargar(14))
Call setvar("history", "cargar", checkcargar(15))
```

```
Call inicializar_series
```

```
Call inicializar
```

```

Call inicializar_composite
Call inicializar_transform
Call inicializar_x11
Call inicializar_identify
Call inicializar_regression
Call inicializar_arima
Call inicializar_automdl
Call inicializar_estimate
Call inicializar_outlier
Call inicializar_check
Call inicializar_forecast
Call inicializar_regadjust
Call inicializar_sliding
Call inicializar_history

'fin new spec file
formx12.Show
menuprincipal.Hide
'activar series
Call setvar("series", "cargar", "yes")
Call setvar("formx12", "arguments0", True)
formx12.SSIndexTabParametros.TabEnabled(0) = True
auxfile$ = menuprincipal.List.List(menuprincipal.List.ListCount - 1)
Call setvar("series", "file", auxfile$)
'no se si alguna vez estará vacío, en principio nunca estará
'vacío este apartado porque se le llama desde la lista cuando
'añade algún elemento, por eso siempre habrá algo, pero por si acaso
Call setvar("series", "name", series_name(CStr(getvar("series", "file"))))
Call setvar("series", "composite", True)

```

**End Sub**

**Sub configur\_3a ()**

**Dim x%**

```

'new spec file
X12IniFile$ = app.Path & "\output\X12conf.dat"
If Dir$(X12IniFile$) <> "" Then
    Kill X12IniFile$
End If

Call titleform

'desactivar todos los arguments
For x% = 0 To 14
    formx12.SSIndexTabParametros.TabEnabled(x%) = False
    Call setvar("formx12", "arguments" & x%, False)
Next x%

```

```

For x% = 1 To 15
    checkcargar(x%) = "no"
Next x%
Call setvar("series", "cargar", checkcargar(1))
Call setvar("composite", "cargar", checkcargar(2))
Call setvar("transform", "cargar", checkcargar(3))
Call setvar("x11", "cargar", checkcargar(4))
Call setvar("identify", "cargar", checkcargar(5))
Call setvar("regression", "cargar", checkcargar(6))
Call setvar("arima", "cargar", checkcargar(7))
Call setvar("automdl", "cargar", checkcargar(8))
Call setvar("estimate", "cargar", checkcargar(9))
Call setvar("outlier", "cargar", checkcargar(10))
Call setvar("check", "cargar", checkcargar(11))
Call setvar("forecast", "cargar", checkcargar(12))
Call setvar("regadjust", "cargar", checkcargar(13))
Call setvar("sliding", "cargar", checkcargar(14))
Call setvar("history", "cargar", checkcargar(15))

```

**Call inicializar\_series**

**Call inicializar**

**Call inicializar\_composite**

```

Call inicializar_transform
Call inicializar_x11
Call inicializar_identify
Call inicializar_regression
Call inicializar_arima
Call inicializar_automdl
Call inicializar_estimate
Call inicializar_outlier
Call inicializar_check
Call inicializar_forecast
Call inicializar_regadjust
Call inicializar_sliding
Call inicializar_history

'fin new spec file
formx12.Show
menuprincipal.Hide
'activar composite
Call setvar("composite", "cargar", "yes")
Call setvar("formx12", "arguments1", True)
formx12.SSIndexTabParametros.TabEnabled(1) = True
Call setvar("composite", "name", menuprincipal.TextSeriesComposite)

```

End Sub

Sub configur\_3b ()

Dim x%, auxfile\$

```

'new spec file
X12IniFile$ = app.Path & "\output\x12conf.dat"
If Dir$(X12IniFile$) <> "" Then
    Kill X12IniFile$
End If

```

Call titleform

'desactivar todos los arguments

For x% = 0 To 14

'formx12.SSIndexTabParametros.TabEnabled(x%) = False

Call setvar("formx12", "arguments" & x%, False)

Next x%

For x% = 1 To 15

checkcargar(x%) = "no"

Next x%

Call setvar("series", "cargar", checkcargar(1))

Call setvar("composite", "cargar", checkcargar(2))

Call setvar("transform", "cargar", checkcargar(3))

Call setvar("x11", "cargar", checkcargar(4))

Call setvar("identify", "cargar", checkcargar(5))

Call setvar("regression", "cargar", checkcargar(6))

Call setvar("arima", "cargar", checkcargar(7))

Call setvar("automdl", "cargar", checkcargar(8))

Call setvar("estimate", "cargar", checkcargar(9))

Call setvar("outlier", "cargar", checkcargar(10))

Call setvar("check", "cargar", checkcargar(11))

Call setvar("forecast", "cargar", checkcargar(12))

Call setvar("regadjust", "cargar", checkcargar(13))

Call setvar("sliding", "cargar", checkcargar(14))

Call setvar("history", "cargar", checkcargar(15))

Call inicializar\_series

Call inicializar

Call inicializar\_composite

Call inicializar\_transform

Call inicializar\_x11

Call inicializar\_identify

Call inicializar\_regression

Call inicializar\_arima

Call inicializar\_automdl

Call inicializar\_estimate

```

Call inicializar_outlier
Call inicializar_check
Call inicializar_forecast
Call inicializar_regadjust
Call inicializar_sliding
Call inicializar_history

```

```

'fin new spec file

```

```

'MIRAR DE HACERLO SIN QUE HAGA NEW SPEC FILE

```

```

auxfile$ = ""
For x% = 0 To menuprincipal.List.ListCount - 1
    If menuprincipal.List.Selected(x%) = True Then
        auxfile$ = menuprincipal.List.List(x%)
        Exit For
    End If
Next x%
If auxfile$ = "" Then
    response = MsgBox("Non of the series were selected", 48, title)
    Exit Sub
Else
    formx12.Show
    menuprincipal.Hide
    'activar series
    Call setvar("series", "cargar", "yes")
    Call setvar("formx12", "arguments0", True)
    formx12.SSIndexTabParametros.TabEnabled(0) = True
    Call setvar("series", "file", auxfile$)
    Call setvar("series", "name", series_name(CStr(getvar("series", "file"))))
    Call setvar("series", "composite", True)
End If

```

```

End Sub

```

```

Sub checkerror ()

```

```

Dim x%, aux$, texterror$, num%

```

```

Select Case runmode%

```

```

Case 0 'normal mode

```

```

    seriesname = app.Path & "output\" & series_name(CStr(getvar("series", "file")))) & ".err"

```

```

    Open seriesname For Input As 1

```

```

    texterror$ = Input(LOF(1), 1)

```

```

    Close #1

```

```

    num% = InStr(texterror$, "ERROR:")

```

```

    If num% <> 0 Then

```

```

        Load errorform

```

```

        errorform.Show

```

```

    End If

```

```

Case 1 'single spec mode

```

```

    texterror$ = ""

```

```

    For x% = 0 To menuprincipal.List.ListCount - 1

```

```

        aux$ = menuprincipal.List.List(x%)

```

```

        seriesname = app.Path & "output\" & series_name(aux$) & ".err"

```

```

        If Dir$(seriesname) <> "" Then 'n

```

```

            Open seriesname For Input As 1

```

```

            texterror$ = texterror$ & Input(LOF(1), 1)

```

```

            Close #1

```

```

        End If 'n

```

```

    Next x%

```

```

    num% = InStr(texterror$, "ERROR:")

```

```

    If num% <> 0 Then

```

```

        Load errorform

```

```

        errorform.Show

```

```

    End If

```

```

Case 2 'multi spec mode

```

```

    texterror$ = ""

```

```

    For x% = 0 To menuprincipal.List.ListCount - 1

```

```

        aux$ = menuprincipal.List.List(x%)

```

```

        seriesname = app.Path & "output\" & series_name(aux$) & ".err"

```

```

        If Dir$(seriesname) <> "" Then 'n

```

```

            Open seriesname For Input As 1

```

```

            texterror$ = texterror$ & Input(LOF(1), 1)

```

```

        Close #1
    End If 'n
Next x%
num% = InStr(texterror$, "ERROR:")
If num% <> 0 Then
    Load errorform
    errorform.Show
End If
Case 3 'composite series
texterror$ = ""
For x% = 0 To menuprincipal.List.ListCount - 1
    aux$ = menuprincipal.List.List(x%)
    seriesname = app.Path & "output\" & series_name(aux$) & ".err"
    If Dir$(seriesname) <> "" Then 'n
        Open seriesname For Input As 1
        texterror$ = texterror$ & Input(LOF(1), 1)
        Close #1
    End If 'n
Next x%
aux$ = menuprincipal.TextSeriesComposite
seriesname = app.Path & "output\" & series_name(aux$) & ".err"
If Dir$(seriesname) <> "" Then 'n
    Open seriesname For Input As 1
    texterror$ = texterror$ & Input(LOF(1), 1)
    Close #1
End If 'n
num% = InStr(texterror$, "ERROR:")
If num% <> 0 Then
    Load errorform
    errorform.Show
End If
End Select

End Sub

Sub series_0 ()
Dim x%, igual$

On Error GoTo errorseries0

menuprincipal.CMDialogMenu.Filter = "Archivos de Datos (*.DAT) |*.dat|Todos los archivos |*.*"
menuprincipal.CMDialogMenu.Filename = ""
menuprincipal.CMDialogMenu.Action = 1
* igual$ = "no"
* If menuprincipal.CMDialogMenu.Filename <> "" Then
*     For x% = 0 To menuprincipal.List.ListCount - 1
*         If menuprincipal.CMDialogMenu.Filename = menuprincipal.List.List(x%) Then
*             igual$ = "yes"
*         End If
*     Next x%
*     If igual$ <> "yes" Then
*         menuprincipal.List.AddItem menuprincipal.CMDialogMenu.Filename
*     End If
* End If
* Exit Sub

menuprincipal.List.List(0) = menuprincipal.CMDialogMenu.Filename 'n
Exit Sub 'n

errorseries0:
Select Case Err
Case 32755
Exit Sub
End Select

End Sub

Sub series_1 ()
Dim x%, igual$

On Error GoTo errorseries1

menuprincipal.CMDialogMenu.Filter = "Archivos de Datos (*.DAT) |*.dat|Todos los archivos |*.*"

```



```

menuprincipal.CMDialogMenu.Filename = ""
menuprincipal.CMDialogMenu.Action = 1
igual$ = "no"
If menuprincipal.CMDialogMenu.Filename <> "" Then
    For x% = 0 To menuprincipal.List.ListCount - 1
        If menuprincipal.CMDialogMenu.Filename = menuprincipal.List.List(x%) Then
            igual$ = "yes"
        End If
    Next x%
    If igual$ <> "yes" Then
        menuprincipal.List.AddItem menuprincipal.CMDialogMenu.Filename
    End If
End If
Exit Sub

errorseries1:
Select Case Err
Case 32755
Exit Sub
End Select

End Sub

Sub series_2 ()
Dim x%, igual$

On Error GoTo errorseries2

menuprincipal.CMDialogMenu.Filter = "Archivos de Datos (*.DAT) |*.dat|Todos los archivos |*.*"
menuprincipal.CMDialogMenu.Filename = ""
menuprincipal.CMDialogMenu.Action = 1
igual$ = "no"
If menuprincipal.CMDialogMenu.Filename <> "" Then
    For x% = 0 To menuprincipal.List.ListCount - 1
        If menuprincipal.CMDialogMenu.Filename = menuprincipal.List.List(x%) Then
            igual$ = "yes"
        End If
    Next x%
    If igual$ <> "yes" Then
        menuprincipal.List.AddItem menuprincipal.CMDialogMenu.Filename
        Call configur_2
    End If
End If
Exit Sub

errorseries2:
Select Case Err
Case 32755
Exit Sub
End Select

End Sub

Sub series_3 ()
Dim x%, igual$

On Error GoTo errorseries3a

menuprincipal.CMDialogMenu.Filter = "Archivos de Datos (*.DAT) |*.dat|Todos los archivos |*.*"
menuprincipal.CMDialogMenu.Filename = ""
menuprincipal.CMDialogMenu.Action = 1
igual$ = "no"
If menuprincipal.CMDialogMenu.Filename <> "" Then
    For x% = 0 To menuprincipal.List.ListCount - 1
        If menuprincipal.CMDialogMenu.Filename = menuprincipal.List.List(x%) Then
            igual$ = "yes"
        End If
    Next x%
    If igual$ <> "yes" Then
        menuprincipal.List.AddItem menuprincipal.CMDialogMenu.Filename
        Call configur_3
    End If
End If

```

Exit Sub

errorseries3a:

Select Case Err

Case 32755

Exit Sub

End Select

End Sub

Sub configur\_1 ()

Dim x%

formx12.Show

menuprincipal.Hide

'activar series

Call setvar("series", "cargar", "yes")

Call setvar("formx12", "arguments0", True)

'hacerlo con el call setvar

formx12.SSIndexTabParametros.TabEnabled(0) = True

'series.labelseriesfile.caption = ""

'series.labelseriesname.caption = ""

Call setvar("series", "file", "")

series.LabelSeriesFile.Enabled = False

series.Command3DSeriesFile.Enabled = False

series.LabelSeriesName.Enabled = False

Call setvar("series", "file", "")

Call setvar("series", "name", "")

'Call setvar("series", "Searchfile", series!Command3DSeriesFile)

End Sub

## 1.2.5. Graph.bas

**Option Explicit**

**Global** GraphArray!(), GraphArraylen%(), col%, datagraph\$nombre del fichero de datos

**Global** seriesgraph\$

**Function** cargar\_datos% ()

**Dim** r%, n\$, fn%

'poner en datagraph\$ el fichero correspondiente

graph\_file

fn% = FreeFile

**Open** datagraph\$ **For** Input **As** 1

'Select Case Mid\$(tables.CMDialog1.FileName, Len(tables.CMDialog1.FileName) - 2, 3)

Select Case Mid\$(datagraph\$, Len(datagraph\$) - 2, 3)

Case ".A1", ".MVA", ".A2", ".A3", ".A10", ".TRN", ".B1", ".B2", ".B3", ".B5"

r% = Cargar\_datos1(fn%, col%)

col% = col% + 1

Case ".B10", ".B11", ".B13", ".B17", ".B20", ".C1", ".C2", ".C4", ".C5", ".C6"

r% = Cargar\_datos1(fn%, col%)

col% = col% + 1

Case ".C7", ".C10", ".C11", ".C13", ".C17", ".C20", ".D1", ".D2", ".D4", ".D5"

r% = Cargar\_datos1(fn%, col%)

col% = col% + 1

Case ".D6", ".D7", ".D8", ".D9", ".D10", ".D11", ".D12", ".D13", ".D16", ".E1"

r% = Cargar\_datos1(fn%, col%)

col% = col% + 1

Case ".E2", ".E5", ".E6", ".E11", ".FSD", ".SAA"

r% = Cargar\_datos1(fn%, col%)

col% = col% + 1

Case ".ACF", ".PCF", ".RSD", ".FTR", ".FVR", ".FCT", ".TAL"

r% = Cargar\_datos1(fn%, col%)

col% = col% + 1

Case ".AO", ".LS", ".TD", ".HOL", ".USR", ".A11" 'mirar

r% = Cargar\_datos1(fn%, col%)

col% = col% + 1

Case ".ROT", ".SFH", ".SAR", ".SAE", ".SFR", ".SFE", ".CHR", ".CHE", ".TRR", ".TRE"

r% = Cargar\_datos1(fn%, col%)

col% = col% + 1

Case ".LKH", ".FCE", ".TCR", ".TCE", ".PSR", ".PSE"

r% = Cargar\_datos1(fn%, col%)

col% = col% + 1

'Case ".H1", ".A4", ".C16", ".C18", ".E4" 'mirarlos

**End Select**

**Close** #fn%

cargar\_datos% = r% - 1

**End Function**

**Sub** graph\_file () 'elegir el fichero según el gráfico

'Select Case tables.TextGraph.Text

Select Case tables.ListGraph.List(tables.ListGraph.ListIndex)

Case "Time series"

datagraph\$ = app.Path & "\output\" & seriesgraph & ".A1"

Case "Time series with missing values replaced"

datagraph\$ = app.Path & "\output\" & seriesgraph & ".MVA"

Case "Prior adjustment factors"

datagraph\$ = app.Path & "\output\" & seriesgraph & ".A2"

Case "Prior adjusted series"

datagraph\$ = app.Path & "\output\" & seriesgraph & ".A3"

Case "Prior adjusted and transformed series"

datagraph\$ = app.Path & "\output\" & seriesgraph & ".TRN"

Case "Henderson trend of prior adjusted series"

datagraph\$ = app.Path & "\output\" & seriesgraph & ".A10"

Case ".ACF"

datagraph\$ = app.Path & "\output\" & seriesgraph & ".ACF"

Case ".PACF"

datagraph\$ = app.Path & "\output\" & seriesgraph & ".PCF"

Case "Residuals"

```

datagraph$ = app.Path & "\\output\\" & seriesgraph & ".RSD"
Case "Final seasonally adjusted series"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".D11"
Case "Final seasonally adjusted series with constrained yearly totals"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".SAA"
Case "Rounded final seasonally adjusted series"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".RND"
Case "Percent changes in seasonally adjusted series"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".E6"
Case "Percent changes in seasonally adjusted series with revised yearly totals"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".E6A"
Case "Percent changes in rounded seasonally adjusted series"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".E6R"
Case "Preliminary seasonally adjusted series, B iteration"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".B6"
Case "Seasonally adjusted series, B iteration"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".B11"
Case "Preliminary seasonally adjusted series, C iteration"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".C6"
Case "Seasonally adjusted series, C iteration"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".C11"
Case "Preliminary seasonally adjusted series, D iteration"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".D6"
Case "Seasonally adjusted series modified for extreme values"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".E2"
Case "Robust final seasonally adjusted series"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".E11"
Case "MCD moving average of the final seasonally adjusted series"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".F1"
Case "Final trend-cycle"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".D12"
Case "Final trend-cycle using original series modified for extreme values"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".E7"
Case "Preliminary trend-cycle, B iteration"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".B2"
Case "Preliminary trend-cycle, B iteration ??"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".B7"
Case "Preliminary trend-cycle, C iteration"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".C2"
Case "Preliminary trend-cycle, C iteration ??"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".C7"
Case "Preliminary trend-cycle, D iteration"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".D2"
Case "Preliminary trend-cycle, D iteration ??"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".D7"
Case "Final trend-cycle adjusted for LS"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".TAL"
Case "Final weights for the irregular component"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".C17"
Case "Final irregular component"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".D13"
Case "Irregular component, B iteration"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".B13"
Case "Preliminary weights for the irregular component"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".B17"
Case "Irregular component, C iteration"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".C13"
Case "Final irregular component adjusted for AO"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".IAO"
Case "Irregular component modified for extreme values"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".E3"
Case "Final seasonal factors"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".D10"
Case "Final seasonal difference"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".FSD"
Case "Combined seasonal and trading day factors"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".D16"
Case "Preliminary seasonal factors, B iteration"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".B5"
Case "Seasonal factors, B iteration"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".B10"
Case "Preliminary seasonal factors, C iteration"
datagraph$ = app.Path & "\\output\\" & seriesgraph & ".C5"

```

```

Case "Preliminary seasonal factors, D iteration"
  datagraph$ = app.Path & "output\" & seriesgraph & ".D5"
Case "Prior trading day factors and weights"
  datagraph$ = app.Path & "output\" & seriesgraph & ".A4"
Case "Final trading day factors and weights"
  datagraph$ = app.Path & "output\" & seriesgraph & ".C16"
Case "Final trading day from combined daily weights"
  datagraph$ = app.Path & "output\" & seriesgraph & ".C18"
Case "Combined seasonal and trading day factors"
  datagraph$ = app.Path & "output\" & seriesgraph & ".D16"
Case "Preliminary trading day factors and weights"
  datagraph$ = app.Path & "output\" & seriesgraph & ".B16"
Case "Preliminary trading day from combined daily weights"
  datagraph$ = app.Path & "output\" & seriesgraph & ".B18"
Case "Original series adjusted for preliminary trading day"
  datagraph$ = app.Path & "output\" & seriesgraph & ".B19"
Case "Combined X-11 holiday adjustment factors"
  datagraph$ = app.Path & "output\" & seriesgraph & ".H1"
Case "Final unmodified si-ratios"
  datagraph$ = app.Path & "output\" & seriesgraph & ".D8"
Case "Final replacement values for si-ratios, D iteration"
  datagraph$ = app.Path & "output\" & seriesgraph & ".D9"
Case "Preliminary unmodified si-ratios"
  datagraph$ = app.Path & "output\" & seriesgraph & ".B3"
Case "Unmodified si-ratios"
  datagraph$ = app.Path & "output\" & seriesgraph & ".B8"
Case "Modified si-ratios, C iteration"
  datagraph$ = app.Path & "output\" & seriesgraph & ".C4"
Case "Modified si-ratios, C iteration"
  datagraph$ = app.Path & "output\" & seriesgraph & ".C9"
Case "Modified si-ratios, D iteration"
  datagraph$ = app.Path & "output\" & seriesgraph & ".D4"
Case "Forecasts on the transformed scale"
  datagraph$ = app.Path & "output\" & seriesgraph & ".FTR"
Case "Forecast error variances on the transformed scale"
  datagraph$ = app.Path & "output\" & seriesgraph & ".FVR"
Case "Forecasts on the original scale"
  datagraph$ = app.Path & "output\" & seriesgraph & ".FCT"
Case "regARIMA Additive outlier factors"
  datagraph$ = app.Path & "output\" & seriesgraph & ".AO"
Case "regARIMA Level change and ramp factors"
  datagraph$ = app.Path & "output\" & seriesgraph & ".LS"
Case "regARIMA Trading day factors"
  datagraph$ = app.Path & "output\" & seriesgraph & ".TD"
Case "regARIMA Holiday factors"
  datagraph$ = app.Path & "output\" & seriesgraph & ".HOL"
Case "Factors from user-defined regression variables"
  datagraph$ = app.Path & "output\" & seriesgraph & ".USR"
Case "Original series adjusted for regARIMA outliers"
  datagraph$ = app.Path & "output\" & seriesgraph & ".A11"
Case "Original series, adjusted for prior effects and forecast extended"
  datagraph$ = app.Path & "output\" & seriesgraph & ".B1"
Case "Ratio of yearly totals for original, seasonally adjusted series"
  datagraph$ = app.Path & "output\" & seriesgraph & ".E4"
Case "Percent changes in original series"
  datagraph$ = app.Path & "output\" & seriesgraph & ".E5"
Case "Original series adjusted for preliminary trading day"
  datagraph$ = app.Path & "output\" & seriesgraph & ".B19"
Case "Original series modified for outliers, td and prior factors, C iteration"
  datagraph$ = app.Path & "output\" & seriesgraph & ".C1"
Case "Original series adjusted for final trading day"
  datagraph$ = app.Path & "output\" & seriesgraph & ".C19"
Case "Original series modified for outliers, td and prior factors, D iteration"
  datagraph$ = app.Path & "output\" & seriesgraph & ".D1"
Case "Original series modified for extreme values"
  datagraph$ = app.Path & "output\" & seriesgraph & ".E1"
Case "Final adjustment difference"
  datagraph$ = app.Path & "output\" & seriesgraph & ".FAD"
Case "Record for outliers"
  datagraph$ = app.Path & "output\" & seriesgraph & ".ROT"
Case "Revision of seasonally adjusted data"
  datagraph$ = app.Path & "output\" & seriesgraph & ".SFH"
Case "Revision of seasonal factors"

```

```

datagraph$ = app.Path & "output\" & seriesgraph$ & ".SAR"
Case "Revision of period-to-period changes in seas.adj."
datagraph$ = app.Path & "output\" & seriesgraph$ & ".SAE"
Case "Revision of trend-component"
datagraph$ = app.Path & "output\" & seriesgraph$ & ".SFR"
Case "Log-likelihood and AIC for observ."
datagraph$ = app.Path & "output\" & seriesgraph$ & ".SFE"
Case "Mean forecast errors for observ."
datagraph$ = app.Path & "output\" & seriesgraph$ & ".CHR"
Case "Revision of period-to-period changes in trend"
datagraph$ = app.Path & "output\" & seriesgraph$ & ".CHE"
Case "Revision of projected seasonal factors"
datagraph$ = app.Path & "output\" & seriesgraph$ & ".TRR"
Case "Record of seasonal filter selection"
datagraph$ = app.Path & "output\" & seriesgraph$ & ".TRE"
Case "Estimates of seasonally adjusted data"
datagraph$ = app.Path & "output\" & seriesgraph$ & ".LKH"
Case "Estimates of seasonal factors"
datagraph$ = app.Path & "output\" & seriesgraph$ & ".FCE"
Case "Estimates of period-to-period"
datagraph$ = app.Path & "output\" & seriesgraph$ & ".TCR"
Case "Estimates of trend component"
datagraph$ = app.Path & "output\" & seriesgraph$ & ".TCE"
Case "Estimates of period-to-period changes in trend"
datagraph$ = app.Path & "output\" & seriesgraph$ & ".PSR"
Case "Estimates of the projected seasonal factors"
datagraph$ = app.Path & "output\" & seriesgraph$ & ".PSE"

```

End Select

End Sub

Sub list\_graph ()

Dim a%

```

a% = False
If Val(getvar("formx12", "arguments0")) <> 0 Then
If Val(getvar("series", "save0")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".A1") <> "" Then
a% = True
End If
End If
End If
If Val(getvar("formx12", "arguments0")) <> 0 Then
If Val(getvar("series", "save1")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".MVA") <> "" Then
a% = True
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx112")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".B1") <> "" Then
a% = True
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1117")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".E4") <> "" Then
a% = True
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1118")) <> 0 Then
If Dir$(app.Path & "output\" & seriesgraph & ".E5") <> "" Then
a% = True
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then

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```

If Val(getvar("x11", "checkx1135")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph & ".B19") <> "" Then
    a% = True
  End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
  If Val(getvar("x11", "checkx1137")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".C1") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
  If Val(getvar("x11", "checkx1147")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".C19") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
  If Val(getvar("x11", "checkx1149")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".D1") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
  If Val(getvar("x11", "checkx1157")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".E1") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments12")) <> 0 Then
  If Val(getvar("regadjust", "save5")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".A11") <> "" Then
      a% = True
    End If
  End If
End If
If a% = False Then
  tables.Command3DGraph(0).Enabled = False
Else
  tables.Command3DGraph(0).Enabled = True
End If

a% = False

If Val(getvar("formx12", "arguments2")) <> 0 Then
  If Val(getvar("transform", "save0")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".A2") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments2")) <> 0 Then
  If Val(getvar("transform", "save1")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".A3") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments2")) <> 0 Then
  If Val(getvar("transform", "save2")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".TRN") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments2")) <> 0 Then
  If Val(getvar("transform", "save3")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".A10") <> "" Then

```

```

    a% = True
End If
End If
End If
If Val(getvar("formx12", "arguments12")) <> 0 Then
If Val(getvar("regadjust", "save4")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".USR") <> "" Then
        a% = True
    End If
End If
End If
End If

If a = False Then
    tables.Command3DGraph(1).Enabled = False
Else
    tables.Command3DGraph(1).Enabled = True
End If

a = False

If Val(getvar("formx12", "arguments10")) <> 0 Then
If Val(getvar("check", "save0")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".ACF") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments10")) <> 0 Then
If Val(getvar("check", "save1")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".PCF") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments8")) <> 0 Then
If Val(getvar("estimate", "checkestimate0")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".RSD") <> "" Then
        a% = True
    End If
End If
End If
End If

If a = False Then
    tables.Command3DGraph(2).Enabled = False
Else
    tables.Command3DGraph(2).Enabled = True
End If

a = False

If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1110")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".D11") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1111")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".SAA") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1112")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".RND") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1116")) <> 0 Then

```



```

If Dir$(app.Path & "\output\" & seriesgraph & ".FAD") <> "" Then
    a% = True
End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1117")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".E4") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1119")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".E6") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1120")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".E6A") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1121")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".E6R") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
If Val(getvar("x11", "checkx1126")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".B6") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1130")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".B11") <> "" Then
            a% = True
        End If
    End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1141")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".C6") <> "" Then
            a% = True
        End If
    End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1145")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".C11") <> "" Then
            a% = True
        End If
    End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1153")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".D6") <> "" Then
            a% = True
        End If
    End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1158")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".E2") <> "" Then
            a% = True
        End If
    End If
End If

```

```

End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1160")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".E11") <> "" Then
            a% = True
        End If
    End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1161")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".F1") <> "" Then
            a% = True
        End If
    End If
End If
End If

If a = False Then
    tables.Command3DGraph(3).Enabled = False
Else
    tables.Command3DGraph(3).Enabled = True
End If

a = False

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1113")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".D12") <> "" Then
            a% = True
        End If
    End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1122")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".E7") <> "" Then
            a% = True
        End If
    End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1123")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".B2") <> "" Then
            a% = True
        End If
    End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1127")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".B7") <> "" Then
            a% = True
        End If
    End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1138")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".C2") <> "" Then
            a% = True
        End If
    End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1142")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".C7") <> "" Then
            a% = True
        End If
    End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1150")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".D2") <> "" Then
            a% = True
        End If
    End If
End If

```

```

End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
  If Val(getvar("x11", "checkx1154")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".D7") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
  If Val(getvar("x11", "checkx1155")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".TAL") <> "" Then
      a% = True
    End If
  End If
End If
If a = False Then
  tables.Command3DGraph(4).Enabled = False
Else
  tables.Command3DGraph(4).Enabled = True
End If

a = False

If Val(getvar("formx12", "arguments3")) <> 0 Then
  If Val(getvar("x11", "checkx114")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".C17") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
  If Val(getvar("x11", "checkx1114")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".D13") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
  If Val(getvar("x11", "checkx1131")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".B13") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
  If Val(getvar("x11", "checkx1133")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".B17") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
  If Val(getvar("x11", "checkx1146")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".C13") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
  If Val(getvar("x11", "checkx1156")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".IAO") <> "" Then
      a% = True
    End If
  End If
End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
  If Val(getvar("x11", "checkx1159")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph & ".E3") <> "" Then
      a% = True
    End If
  End If
End If
If a = False Then

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tables.Command3DGraph(5).Enabled = False
Else
    tables.Command3DGraph(5).Enabled = True
End If

a = False

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx118")) <> 0 = True Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".D10") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx119")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".FSD") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx115")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".D16") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1125")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".B5") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1129")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".B10") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1140")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".C5") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1152")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".D5") <> "" Then
            a% = True
        End If
    End If
End If

If a = False Then
    tables.Command3DGraph(6).Enabled = False
Else
    tables.Command3DGraph(6).Enabled = True
End If

a = False

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx111")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".A4") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx113")) <> 0 Then

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    If Dir$(app.Path & "\output\" & seriesgraph & ".C16") <> "" Then
    a% = True
    End If
    End If
    End If
    End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx115")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".C18") <> "" Then
        a% = True
        End If
        End If
        End If
        End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx115")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".D16") <> "" Then
        a% = True
        End If
        End If
        End If
        End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1132")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".B16") <> "" Then
        a% = True
        End If
        End If
        End If
        End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1134")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".B18") <> "" Then
        a% = True
        End If
        End If
        End If
        End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1135")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".B19") <> "" Then
        a% = True
        End If
        End If
        End If
        End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("regadjust", "save2")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".TD") <> "" Then
        a% = True
        End If
        End If
        End If
        End If

If a = False Then
    tables.Command3DGraph(7).Enabled = False
Else
    tables.Command3DGraph(7).Enabled = True
End If

a = False

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx110")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".H1") <> "" Then
        a% = True
        End If
        End If
        End If
        End If
If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("regadjust", "save3")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".HOL") <> "" Then
        a% = True
        End If
        End If
        End If
        End If

If a = False Then
    tables.Command3DGraph(8).Enabled = False

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Else
    tables.Command3DGraph(8).Enabled = True
End If

a = False

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx116")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".D8") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx117")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".D9") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1124")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".B3") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1128")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".B8") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1139")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".C4") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1143")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".C9") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments3")) <> 0 Then
    If Val(getvar("x11", "checkx1151")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".D4") <> "" Then
            a% = True
        End If
    End If
End If

If a = False Then
    tables.Command3DGraph(9).Enabled = False
Else
    tables.Command3DGraph(9).Enabled = True
End If

a = False

If Val(getvar("formx12", "arguments12")) <> 0 Then
    If Val(getvar("regadjust", "save0")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".AO") <> "" Then
            a% = True
        End If
    End If
End If

If Val(getvar("formx12", "arguments12")) <> 0 Then
    If Val(getvar("regadjust", "save1")) <> 0 Then

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    If Dir$(app.Path & "\output\" & seriesgraph & ".LS") <> "" Then
a% = True
    End If
    End If
    End If
    End If

If a = False Then
tables.Command3DGraph(10).Enabled = False
Else
tables.Command3DGraph(10).Enabled = True
End If

a = False

If Val(getvar("formx12", "arguments11")) <> 0 Then
    If Val(getvar("forecast", "save0")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph & ".FTR") <> "" Then
a% = True
            End If
            End If
            End If
        If Val(getvar("formx12", "arguments11")) <> 0 Then
            If Val(getvar("forecast", "save1")) <> 0 Then
                If Dir$(app.Path & "\output\" & seriesgraph & ".FVR") <> "" Then
a% = True
                    End If
                    End If
                    End If
            If Val(getvar("formx12", "arguments11")) <> 0 Then
                If Val(getvar("forecast", "save2")) <> 0 Then
                    If Dir$(app.Path & "\output\" & seriesgraph & ".FCT") <> "" Then
a% = True
                        End If
                        End If
                        End If
                    End If

If a = False Then
tables.Command3DGraph(11).Enabled = False
Else
tables.Command3DGraph(11).Enabled = True
End If

a% = False

If Val(getvar("formx12", "arguments13")) <> 0 Then
    If Val(getvar("sliding", "save0")) <> 0 Then
        If Dir$(app.Path & "\output\" & seriesgraph$ & ".SFS") <> "" Then
a% = True
            End If
            End If
            End If
        If Val(getvar("formx12", "arguments13")) <> 0 Then
            If Val(getvar("sliding", "save1")) <> 0 Then
                If Dir$(app.Path & "\output\" & seriesgraph$ & ".CHS") <> "" Then
a% = True
                    End If
                    End If
                    End If
            If Val(getvar("formx12", "arguments13")) <> 0 Then
                If Val(getvar("sliding", "save2")) <> 0 Then
                    If Dir$(app.Path & "\output\" & seriesgraph$ & ".SAS") <> "" Then
a% = True
                        End If
                        End If
                        End If
                    End If
            If Val(getvar("formx12", "arguments13")) <> 0 Then
                If Val(getvar("sliding", "save3")) <> 0 Then
                    If Dir$(app.Path & "\output\" & seriesgraph$ & ".YCS") <> "" Then
a% = True
                        End If
                        End If
                        End If
                    End If
            If Val(getvar("formx12", "arguments13")) <> 0 Then

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If Val(getvar("sliding", "save4")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".TDS") <> "" Then
    a% = True
  End If
End If
End If
End If
If Val(getvar("formx12", "arguments13")) <> 0 Then
  If Val(getvar("sliding", "save5")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".SIS") <> "" Then
      a% = True
    End If
  End If
End If
End If
If Val(getvar("formx12", "arguments13")) <> 0 Then
  If Val(getvar("sliding", "save6")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".CIS") <> "" Then
      a% = True
    End If
  End If
End If
End If
If Val(getvar("formx12", "arguments13")) <> 0 Then
  If Val(getvar("sliding", "save7")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".AIS") <> "" Then
      a% = True
    End If
  End If
End If
End If
If Val(getvar("formx12", "arguments13")) <> 0 Then
  If Val(getvar("sliding", "save8")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".YIS") <> "" Then
      a% = True
    End If
  End If
End If
End If

If a% = False Then
  tables.Command3DGraph(12).Enabled = False
Else
  tables.Command3DGraph(12).Enabled = True
End If

a% = False

If Val(getvar("formx12", "arguments14")) <> 0 Then
  If Val(getvar("history", "save0")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".ROT") <> "" Then
      a% = True
    End If
  End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
  If Val(getvar("history", "save1")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".SFH") <> "" Then
      a% = True
    End If
  End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
  If Val(getvar("history", "save2")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".SAR") <> "" Then
      a% = True
    End If
  End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
  If Val(getvar("history", "save3")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".SAE") <> "" Then
      a% = True
    End If
  End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
  If Val(getvar("history", "save4")) <> 0 Then

```



```

If Dir$(app.Path & "\output\" & seriesgraph$ & ".SFR") <> "" Then
    a% = True
End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save5")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".SFE") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save6")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".CHR") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save7")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".CHE") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save8")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".TRR") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save9")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".TRE") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save10")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".LKH") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save11")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".FCE") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save12")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".TCR") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save13")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".TCE") <> "" Then
        a% = True
    End If
End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save14")) <> 0 Then
    If Dir$(app.Path & "\output\" & seriesgraph$ & ".PSR") <> "" Then
        a% = True
    End If
End If

```

```

End If
End If
If Val(getvar("formx12", "arguments14")) <> 0 Then
If Val(getvar("history", "save15")) <> 0 Then
  If Dir$(app.Path & "\output\" & seriesgraph$ & ".PSE") <> "" Then
    a% = True
  End If
End If
End If

If a% = False Then
  tables.Command3DGraph(13).Enabled = False
Else
  tables.Command3DGraph(13).Enabled = True
End If

End Sub

```

## **1.3. FICHEROS .TXT**

### **1.3.1. Vtss.txt**

**Option Explicit**

' vtss.txt

' Copyright (c) 1992-1994, VisualTools Inc.

' Contains constants and function declarations for  
' accessing the Formula One 2.0 engine, VTSSDLL.DLL

**Type POLYPOINT**

**x As Integer**

**y As Integer**

**End Type**

**Global Const kFormatRCNrBufSize = 16**

**Global Const kModeNormal = 0**

**Global Const kModeLine = 1**

**Global Const kModeRectangle = 2**

**Global Const kModeOval = 3**

**Global Const kModeArc = 4**

**Global Const kModeChart = 5**

**Global Const kModeField = 6**

**Global Const kModeButton = 7**

**Global Const kModePolygon = 8**

**Global Const kModeCheckBox = 9**

**Global Const kModeDropDown = 10**

**Global Const kPolyEditModeNormal = 0**

**Global Const kPolyEditModePoints = 1**

**Global Const kShiftHorizontal = 1**

**Global Const kShiftVertical = 2**

**Global Const kShiftRows = 3**

**Global Const kShiftCols = 4**

**Global Const kHAlignGeneral = 1**

**Global Const kHAlignLeft = 2**

**Global Const kHAlignCenter = 3**

**Global Const kHAlignRight = 4**

**Global Const kHAlignFill = 5**

**Global Const kHAlignJustify = 6**

**Global Const kHAlignCenterAcrossCells = 7**

**Global Const kVAlignTop = 1**

**Global Const kVAlignCenter = 2**

**Global Const kVAlignBottom = 3**

**Global Const kClearDlg = 0**

**Global Const kClearAll = 1**

**Global Const kClearFormats = 2**

**Global Const kClearValues = 3**

**Global Const kFileFormulaOne = 1**

**Global Const kFileExcel4 = 2**

**Global Const kFileTabbedText = 3**     ' Only SSRead() supports this type.

**Global Const kSSObjLine = 1**

**Global Const kSSObjRectangle = 2**

**Global Const kSSObjOval = 3**

**Global Const kSSObjArc = 4**

**Global Const kSSObjButton = 7**

**Global Const kSSObjPolygon = 8**

**Global Const kSSObjCheckBox = 9**

**Global Const kSSObjDropDown = 10**

**Global Const SSM\_CHANGE = 1024**

**Global Const SSM\_SELCHANGE = 1025**

**Global Const SSM\_STARTEDIT = 1026**

```

Global Const SSM_ENDEDIT = 1027
Global Const SSM_STARTRECALC = 1028
Global Const SSM_ENDRECALC = 1029
Global Const SSM_CLICK = 1030
Global Const SSM_DBLCLICK = 1031
Global Const SSM_DELETEROW = 1032
Global Const SSM_REFRESHROW = 1033
Global Const SSM_CELLCHANGED = 1034
Global Const SSM_SETFOCUS = 1035
Global Const SSM_MODIFIED = 1036
Global Const SSM_DELETETABLE = 1037
Global Const SSM_HELP = 1038
Global Const SSM_DATAMOVE = 1039
Global Const SSM_CANCELEDIT = 1040
Global Const SSM_DIALOGBOXPARAM = 1041
Global Const SSM_FETCH = 1042
Global Const SSM_GETDATAROWS = 1043
Global Const SSM_TOPLEFTCHANGED = 1044
Global Const SSM_OBJCLICK = 1045
Global Const SSM_OBJDBLCLICK = 1046
Global Const SSM_RCLICK = 1047
Global Const SSM_RDBLCLICK = 1048

Global Const SSERROR_NONE = 0
Global Const SSERROR_GENERAL = 1
Global Const SSERROR_BAD_ARGUMENT = 2
Global Const SSERROR_NO_MEMORY = 3
Global Const SSERROR_BAD_FORMULA = 4
Global Const SSERROR_BUF_TOO_SHORT = 5
Global Const SSERROR_NOT_FOUND = 6
Global Const SSERROR_BAD_RC = 7
Global Const SSERROR_BAD_HSS = 8
Global Const SSERROR_TOO_MANY_HSS = 9
Global Const SSERROR_NO_TABLE = 10
Global Const SSERROR_UNABLE_TO_OPEN_FILE = 11
Global Const SSERROR_INVALID_FILE = 12
Global Const SSERROR_INSERT_SHIFT_OFF_TABLE = 13
Global Const SSERROR_ONLY_ONE_RANGE = 14
Global Const SSERROR_NOTHING_TO_PASTE = 15
Global Const SSERROR_BAD_NUMBER_FORMAT = 16
Global Const SSERROR_TOO_MANY_FONTS = 17
Global Const SSERROR_TOO_MANY_SELECTED_RANGES = 18
Global Const SSERROR_UNABLE_TO_WRITE_FILE = 19
Global Const SSERROR_NO_TRANSACTION = 20
Global Const SSERROR_NOTHING_TO_PRINT = 21
Global Const SSERROR_PRINT_MARGINS_DONT_FIT = 22
Global Const SSERROR_CANCEL = 23
Global Const SSERROR_UNABLE_TO_INITIALIZE_PRINTER = 24
Global Const SSERROR_STRING_TOO_LONG = 25
Global Const SSERROR_FORMULA_TOO_LONG = 26
Global Const SSERROR_UNABLE_TO_OPEN_CLIPBOARD = 27
Global Const SSERROR_PASTE_WOULD_OVERFLOW_SHEET = 28
Global Const SSERROR_LOCKED_CELLS_CANNOT_BE_MODIFIED = 29
Global Const SSERROR_LOCKED_DOC_CANNOT_BE_MODIFIED = 30
Global Const SSERROR_INVALID_NAME = 31
Global Const SSERROR_CANT_DELETE_NAME_IN_USE = 32
Global Const SSERROR_UNABLE_TO_FIND_NAME = 33
Global Const SSERROR_NO_WINDOW = 34
Global Const SSERROR_SELECTION = 35
Global Const SSERROR_TOO_MANY_OBJECTS = 36
Global Const SSERROR_INVALID_OBJECT_TYPE = 37
Global Const SSERROR_OBJECT_NOT_FOUND = 38
Global Const SSERROR_INVALID_REQUEST = 39

Declare Function SSAddColPageBreak% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nCol%)
Declare Function SSAddPageBreak% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSAddRowPageBreak% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%)
Declare Function SSAddSelection% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nR1%, ByVal nC1%, ByVal nR2%, ByVal nC2%)
Declare Function SSAttach% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pTitle$)
Declare Function SSAttachToSS% Lib "VTSSDLL.DLL" (ByVal hDstSS&, ByVal hSrcSS&)
Declare Function SSCalculationDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)

```

```

Declare Function SSCallWindowProc% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nMessage%, ByVal wParam%, ByVal lParam%)
Declare Function SSCancelEdit% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSCanEditPaste% Lib "VTSSDLL.DLL" (ByVal hSS&, pCanEditPaste%)
Declare Function SSEditPasteValues% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSCheckModified% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSCheckRecalc% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSClearClipboard% Lib "VTSSDLL.DLL" ()
Declare Function SSClearRange% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nR1%, ByVal nC1%, ByVal nR2%, ByVal nC2%, ByVal nClearType%)
Declare Function SSColorPaletteDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSColWidthDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSCopyAll% Lib "VTSSDLL.DLL" (ByVal hDstSS&, ByVal hSrcSS&)
Declare Function SSCopyRange% Lib "VTSSDLL.DLL" (ByVal hDstSS&, ByVal nDstR1%, ByVal nDstC1%, ByVal nDstR2%, ByVal nDstC2%, ByVal hSrcSS&, ByVal nSrcR1%, ByVal nSrcC1%, ByVal nSrcR2%, ByVal nSrcC2%)
Declare Function SSDefinedNameDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSDelete% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bSendDeleteTableMsg%)
Declare Function SSDeleteDefinedName% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pName$)
Declare Function SSDeleteRange% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nR1%, ByVal nC1%, ByVal nR2%, ByVal nC2%, ByVal nShiftType%)
Declare Function SSDeleteTable% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSEditBarDelete% Lib "VTSSDLL.DLL" (ByVal hSSEdit&)
Declare Function SSEditBarHeight% Lib "VTSSDLL.DLL" ()
Declare Function SSEditBarMove% Lib "VTSSDLL.DLL" (ByVal hSSEdit&, ByVal x%, ByVal y%, ByVal cx%, ByVal cy%)
Declare Function SSEditBarNew% Lib "VTSSDLL.DLL" (ByVal hWndParent%, pSSEdit&)
Declare Function SSEditClear% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nClearType%)
Declare Function SSEditCopy% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSEditCopyDown% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSEditCopyRight% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSEditCut% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSEditDelete% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nShiftType%)
Declare Function SSEditInsert% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nShiftType%)
Declare Function SSEditPaste% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSEndEdit% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSErrorNumberToText% Lib "VTSSDLL.DLL" (ByVal nError%, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSFilePageSetupDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFilePrint% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bShowPrintDlg%)
Declare Function SSFilePrintSetupDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatAlignmentDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatBorderDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatCurrency0% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatCurrency2% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatFixed% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatFixed2% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatFontDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatFraction% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatGeneral% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatHmmampm% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatMdy% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatNumberDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatPatternDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatPercent% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSFormatRCNr% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%, ByVal bDoAbsolute%, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSFormatScientific% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSGetActiveCell% Lib "VTSSDLL.DLL" (ByVal hSS&, pRow%, pCol%)
Declare Function SSGetAlignment% Lib "VTSSDLL.DLL" (ByVal hSS&, pHorizontal%, pWordWrap%, pVertical%, pOrientation%)
Declare Function SSGetAllowArrows% Lib "VTSSDLL.DLL" (ByVal hSS&, pAllowArrows%)
Declare Function SSGetAllowDelete% Lib "VTSSDLL.DLL" (ByVal hSS&, pAllowDelete%)
Declare Function SSGetAllowEditHeaders% Lib "VTSSDLL.DLL" (ByVal hSS&, pAllowEditHeaders%)
Declare Function SSGetAllowFillRange% Lib "VTSSDLL.DLL" (ByVal hSS&, pAllowFillRange%)
Declare Function SSGetAllowInCellEditing% Lib "VTSSDLL.DLL" (ByVal hSS&, pAllowInCellEditing%)
Declare Function SSGetAllowMoveRange% Lib "VTSSDLL.DLL" (ByVal hSS&, pAllowMoveRange%)
Declare Function SSGetAllowObjSelections% Lib "VTSSDLL.DLL" (ByVal hSS&, pAllowObjSelections%)
Declare Function SSGetAllowResize% Lib "VTSSDLL.DLL" (ByVal hSS&, pAllowResize%)
Declare Function SSGetAllowSelections% Lib "VTSSDLL.DLL" (ByVal hSS&, pAllowSelections%)
Declare Function SSGetAllowTabs% Lib "VTSSDLL.DLL" (ByVal hSS&, pAllowTabs%)
Declare Function SSGetAllowFormulas% Lib "VTSSDLL.DLL" (ByVal hSS&, pAllowFormulas%)
Declare Function SSGetAppName% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetAutoRecalc% Lib "VTSSDLL.DLL" (ByVal hSS&, pAutoRecalc%)
Declare Function SSGetBackColor% Lib "VTSSDLL.DLL" (ByVal hSS&, pBackColor&)

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Declare Function SSGetBorder% Lib "VTSSDLL.DLL" (ByVal hSS&, pLeft%, pRight%, pTop%, pBottom%, pShade%, pcrLeft&,
pcrRight&, pcrTop&, pcrBottom&)
Declare Function SSGetColText% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nCol%, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetColWidth% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nCol%, pWidth%)
Declare Function SSGetDefinedName% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pName$, ByVal Buf$, ByVal nBufSize%)
Declare Function SSGetDoSetCursor% Lib "VTSSDLL.DLL" (ByVal hSS&, pDoSetCursor%)
Declare Function SSGetEnableProtection% Lib "VTSSDLL.DLL" (ByVal hSS&, pEnableProtection%)
Declare Function SSGetEnterMovesDown% Lib "VTSSDLL.DLL" (ByVal hSS&, pEnterMovesDown%)
Declare Function SSGetEntry% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetEntryRC% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%, ByVal Buf$, ByVal
nBufSize%)
Declare Function SSGetExtraColor% Lib "VTSSDLL.DLL" (ByVal hSS&, pExtraColor&)
Declare Function SSGetFireEvent% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nEvent%, pFireIt%)
Declare Function SSGetFixedCols% Lib "VTSSDLL.DLL" (ByVal hSS&, pC1%, pCols%)
Declare Function SSGetFixedRows% Lib "VTSSDLL.DLL" (ByVal hSS&, pR1%, pRows%)
Declare Function SSGetFont% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%, pSize%, pBold%, pItalic%,
pUnderline%, pStrikeout%, pcrColor&, pOutline%, pShadow%)
Declare Function SSGetFormattedText% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetFormattedTextRC% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%, ByVal pBuf$,
ByVal nBufSize%)
Declare Function SSGetFormula% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetFormulaRC% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%, ByVal Buf$, ByVal
nBufSize%)
Declare Function SSGetHdrHeight% Lib "VTSSDLL.DLL" (ByVal hSS&, pHeight%)
Declare Function SSGetHdrSelection% Lib "VTSSDLL.DLL" (ByVal hSS&, pTopLeftHdr%, pRowHdr%, pColHdr%)
Declare Function SSGetHdrWidth% Lib "VTSSDLL.DLL" (ByVal hSS&, pWidth%)
Declare Function SSGetIteration% Lib "VTSSDLL.DLL" (ByVal hSS&, pIteration%, pMaxIterations%, pMaxChange%)
Declare Function SSGetLastCol% Lib "VTSSDLL.DLL" (ByVal hSS&, pLastCol%)
Declare Function SSGetLastColForRow% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, pLastColForRow%)
Declare Function SSGetLastRow% Lib "VTSSDLL.DLL" (ByVal hSS&, pLastRow%)
Declare Function SSGetLeftCol% Lib "VTSSDLL.DLL" (ByVal hSS&, pLeftCol%)
Declare Function SSGetLineStyle% Lib "VTSSDLL.DLL" (ByVal hSS&, pStyle%, pcrColor&, pWeight%)
Declare Function SSGetLogicalRC% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%, plsTrue%)
Declare Function SSGetMinCol% Lib "VTSSDLL.DLL" (ByVal hSS&, pMinCol%)
Declare Function SSGetMinRow% Lib "VTSSDLL.DLL" (ByVal hSS&, pMinRow%)
Declare Function SSGetMaxCol% Lib "VTSSDLL.DLL" (ByVal hSS&, pMaxCol%)
Declare Function SSGetMaxRow% Lib "VTSSDLL.DLL" (ByVal hSS&, pMaxRow%)
Declare Function SSGetMode% Lib "VTSSDLL.DLL" (ByVal hSS&, pMode%)
Declare Function SSGetNumber% Lib "VTSSDLL.DLL" (ByVal hSS&, pNumber%)
Declare Function SSGetNumberFormat% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetNumberRC% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%, pNumber%)
Declare Function SSGetPattern% Lib "VTSSDLL.DLL" (ByVal hSS&, pPattern%, pcrFG&, pcrBG&)
Declare Function SSGetPolyEditMode% Lib "VTSSDLL.DLL" (ByVal hSS&, pPolyEditMode%)
Declare Function SSGetPrintArea% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetPrintBottomMargin% Lib "VTSSDLL.DLL" (ByVal hSS&, pPrintBottomMargin%)
Declare Function SSGetPrintColHeading% Lib "VTSSDLL.DLL" (ByVal hSS&, pPrintColHeading%)
Declare Function SSGetPrintFooter% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetPrintGridLines% Lib "VTSSDLL.DLL" (ByVal hSS&, pPrintGridLines%)
Declare Function SSGetPrintHCenter% Lib "VTSSDLL.DLL" (ByVal hSS&, pPrintHCenter%)
Declare Function SSGetPrintHeader% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetPrintLeftMargin% Lib "VTSSDLL.DLL" (ByVal hSS&, pPrintLeftMargin%)
Declare Function SSGetPrintLeftToRight% Lib "VTSSDLL.DLL" (ByVal hSS&, pPrintLeftToRight%)
Declare Function SSGetPrintNoColor% Lib "VTSSDLL.DLL" (ByVal hSS&, pNoColor%)
Declare Function SSGetPrintRightMargin% Lib "VTSSDLL.DLL" (ByVal hSS&, pPrintRightMargin%)
Declare Function SSGetPrintRowHeading% Lib "VTSSDLL.DLL" (ByVal hSS&, pPrintRowHeading%)
Declare Function SSGetPrintScale% Lib "VTSSDLL.DLL" (ByVal hSS&, pScale%, pFitToPage%, pVPages%, pHPages%)
Declare Function SSGetPrintTitles% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetPrintTopMargin% Lib "VTSSDLL.DLL" (ByVal hSS&, pPrintTopMargin%)
Declare Function SSGetPrintVCenter% Lib "VTSSDLL.DLL" (ByVal hSS&, pPrintVCenter%)
Declare Function SSGetProtection% Lib "VTSSDLL.DLL" (ByVal hSS&, pLocked%, pHidden%)
Declare Function SSGetRepaint% Lib "VTSSDLL.DLL" (ByVal hSS&, pRepaint%)
Declare Function SSGetRowHeight% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, pHeight%)
Declare Function SSGetRowMode% Lib "VTSSDLL.DLL" (ByVal hSS&, pRowMode%)
Declare Function SSGetRowText% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetScale% Lib "VTSSDLL.DLL" (ByVal hSS&, pScale%)
Declare Function SSGetSelection% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nSelection%, pR1%, pC1%, pR2%, pC2%)
Declare Function SSGetSelectionCount% Lib "VTSSDLL.DLL" (ByVal hSS&, pCount%)
Declare Function SSGetSelectionRef% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetShowColHeading% Lib "VTSSDLL.DLL" (ByVal hSS&, pShowColHeading%)
Declare Function SSGetShowFormulas% Lib "VTSSDLL.DLL" (ByVal hSS&, pShowFormulas%)
Declare Function SSGetShowGridLines% Lib "VTSSDLL.DLL" (ByVal hSS&, pShowGridLines%)
Declare Function SSGetShowHScrollBar% Lib "VTSSDLL.DLL" (ByVal hSS&, pShowHScrollBar%)
Declare Function SSGetShowRowHeading% Lib "VTSSDLL.DLL" (ByVal hSS&, pShowRowHeading%)

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Declare Function SSGetShowSelections% Lib "VTSSDLL.DLL" (ByVal hSS&, pShowSelections%)
Declare Function SSGetShowVScrollBar% Lib "VTSSDLL.DLL" (ByVal hSS&, pShowVScrollBar%)
Declare Function SSGetShowZeroValues% Lib "VTSSDLL.DLL" (ByVal hSS&, pShowZeroValues%)
Declare Function SSGetSSEdit% Lib "VTSSDLL.DLL" (ByVal hSS&, pSSEdit&)
Declare Function SSGetTabbedText% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nR1%, ByVal nC1%, ByVal nR2%, ByVal nC2%, ByVal bValuesOnly%, phText%)
Declare Function SSGetText% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetTextRC% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetTitle% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetTopLeftText% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSGetTopRow% Lib "VTSSDLL.DLL" (ByVal hSS&, pTopRow%)
Declare Function SSGetTypeRC% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%, pType%)
Declare Function SSgotoDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSInitTable% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSInsertRange% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nR1%, ByVal nC1%, ByVal nR2%, ByVal nC2%, ByVal nShiftType%)
Declare Function SSLaunchAppDesigner% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSLineStyleDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSMaxCol% Lib "VTSSDLL.DLL" ()
Declare Function SSMaxRow% Lib "VTSSDLL.DLL" ()
Declare Function SSMoveRange% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nR1%, ByVal nC1%, ByVal nR2%, ByVal nC2%, ByVal nRowOffset%, ByVal nColOffset%)
Declare Function SSNew% Lib "VTSSDLL.DLL" (ByVal hWnd%, pSS&)
Declare Function SSNextColPageBreak% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nCol%, pNextCol%)
Declare Function SSNextRowPageBreak% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, pNextRow%)
Declare Function SSOBJAddItem% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal pItem$)
Declare Function SSOBJAddSelection% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&)
Declare Function SSOBJBringToFront% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSOBJDeleteItem% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal nItem%)
Declare Function SSOBJFirstID% Lib "VTSSDLL.DLL" (ByVal hSS&, pFirstID&)
Declare Function SSOBJGetCell% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, pHasCell%, pRow%, pCol%)
Declare Function SSOBJGetItem% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal nItem%, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSOBJGetItemCount% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, pItem$)
Declare Function SSOBJGetItems% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSOBJGetName% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSOBJGetPos% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, pX1!, pY1!, pX2!, pY2!)
Declare Function SSOBJGetSelection% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nSelection%, pID&)
Declare Function SSOBJGetSelectionCount% Lib "VTSSDLL.DLL" (ByVal hSS&, pCount%)
Declare Function SSOBJGetText% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal pBuf$, ByVal nBufSize%)
Declare Function SSOBJGetType% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, pType%)
Declare Function SSOBJGetValue% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, pValue%)
Declare Function SSOBJGetVisible% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, pVisible%)
Declare Function SSOBJInsertItem% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal nItem%, ByVal pItem$)
Declare Function SSOBJNameDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSOBJNameToID% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pName$, pID&)
Declare Function SSOBJNew% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nType%, ByVal nX1!, ByVal nY1!, ByVal nX2!, ByVal nY2!, pID&)
Declare Function SSOBJNewPicture% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nX1!, ByVal nY1!, ByVal nX2!, ByVal nY2!, pID&, ByVal hMF%, ByVal nMapMode%, ByVal nWndExtentX%, ByVal nWndExtentY%)
Declare Function SSOBJNewPolygon% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nX1!, ByVal nY1!, ByVal nX2!, ByVal nY2!, pID&, pPoints As POLYPOINT, ByVal nPoints%, ByVal bClosed%)
Declare Function SSOBJNextID% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, pNextID&)
Declare Function SSOBJOptionsDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSOBJPosToTwips% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nX1!, ByVal nY1!, ByVal nX2!, ByVal nY2!, pX&, pY&, pCX&, pCY&, pShown%)
Declare Function SSOBJSendToBack% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSOBJSetCell% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal bHasCell%, ByVal nRow%, ByVal nCol%)
Declare Function SSOBJSetItem% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal nItem%, ByVal pItem$)
Declare Function SSOBJSetItems% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal pItem$)
Declare Function SSOBJSetName% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal pName$)
Declare Function SSOBJSetPicture% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal hMF%, ByVal nMapMode%, ByVal nWndExtentX%, ByVal nWndExtentY%)
Declare Function SSOBJSetPolygonPoints% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, pPoints As POLYPOINT, ByVal nPoints%, ByVal bClosed%)
Declare Function SSOBJSetPos% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal nX1!, ByVal nY1!, ByVal nX2!, ByVal nY2!)
Declare Function SSOBJSetSelection% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&)
Declare Function SSOBJSetText% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal pText$)
Declare Function SSOBJSetValue% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal nValue%)
Declare Function SSOBJSetVisible% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal ID&, ByVal bVisible%)

```

```

Declare Function SSOpenFileDialog Lib "VTSSDLL.DLL" (ByVal pTitle$, ByVal hWndParent%, ByVal pBuf$, ByVal
nBufSize%)
Declare Function SSProtectionDlg Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSRangeToTwips Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow1%, ByVal nCol1%, ByVal nRow2%,
ByVal nCol2%, pX&, pY&, pCX&, pCY&, pShown%)
Declare Function SSRead Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pPathName$, pFileType%)
Declare Function SSReadIO Lib "VTSSDLL.DLL" (ByVal hSS&, dwUserData&, ByVal ioFunc&, pUserRet&)
Declare Function SSRecalc Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSRemoveColPageBreak Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nCol%)
Declare Function SSRemovePageBreak Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSRemoveRowPageBreak Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%)
Declare Function SSRowHeightDlg Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSSaveFileDialog Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pTitle$, ByVal pBuf$, ByVal nBufSize%,
pFileType%)
Declare Function SSSaveWindowInfo Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSSetActiveCell Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%)
Declare Function SSSetAlignment Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nHorizontal%, ByVal bWordWrap%, ByVal
nVertical%, ByVal nOrientation%)
Declare Function SSSetAllowArrows Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bAllowArrows%)
Declare Function SSSetAllowDelete Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bAllowDelete%)
Declare Function SSSetAllowEditHeaders Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bAllowEditHeaders%)
Declare Function SSSetAllowFillRange Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bAllowFillRange%)
Declare Function SSSetAllowInCellEditing Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bAllowInCellEditing%)
Declare Function SSSetAllowMoveRange Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bAllowMoveRange%)
Declare Function SSSetAllowObjSelections Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bAllowObjSelections%)
Declare Function SSSetAllowResize Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bAllowResize%)
Declare Function SSSetAllowSelections Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bAllowSelections%)
Declare Function SSSetAllowTabs Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bAllowTabs%)
Declare Function SSSetAllowFormulas Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bAllowFormulas%)
Declare Function SSSetAutoRecalc Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bAutoRecalc%)
Declare Function SSSetAppName Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pAppName$)
Declare Function SSSetBackColor Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal crBackColor&)
Declare Function SSSetBorder Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nLeft%, ByVal nRight%, ByVal nOutline%,
ByVal nTop%, ByVal nBottom%, ByVal nShade%, ByVal crOutline&, ByVal crLeft&, ByVal crRight&, ByVal crTop&,
ByVal crBottom&)
Declare Function SSSetColText Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nCol%, ByVal pColText$)
Declare Function SSSetColWidth Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nC1%, ByVal nC2%, ByVal nWidth%,
ByVal bDefColWidth%)
Declare Function SSSetColWidthAuto Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nR1%, ByVal nC1%, ByVal nR2%,
ByVal nC2%, ByVal bSetDefaults%)
Declare Function SSSetDefinedName Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pName$, ByVal pFormula$)
Declare Function SSSetDefWindowProc Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pWindowProc&)
Declare Function SSSetDoSetCursor Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bDoSetCursor%)
Declare Function SSSetEnableProtection Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bEnableProtection%)
Declare Function SSSetEnterMovesDown Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bEnterMovesDown%)
Declare Function SSSetEntry Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pEntry$)
Declare Function SSSetEntryRC Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%, ByVal pEntry$)
Declare Function SSSetExtraColor Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal crExtraColor&)
Declare Function SSSetFireEvent Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nEvent%, ByVal bFireIt%)
Declare Function SSSetFixedCols Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nC1%, ByVal nCols%)
Declare Function SSSetFixedRows Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nR1%, ByVal nRows%)
Declare Function SSSetFont Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pName$, ByVal nSize%, ByVal bBold%,
ByVal bItalic%, ByVal bUnderline%, ByVal bStrikeout%, ByVal crColor&, ByVal bOutline%, ByVal bShadow%)
Declare Function SSSetFormula Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pFormula$)
Declare Function SSSetFormulaRC Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%, ByVal pFormula$)
Declare Function SSSetHdrHeight Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nHeight%)
Declare Function SSSetHdrSelection Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bTopLeftHdr%, ByVal bRowHdr%,
ByVal bColHdr%)
Declare Function SSSetHdrWidth Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nWidth%)
Declare Function SSSetIteration Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bIteration%, ByVal nMaxIterations%,
ByVal nMaxChange#)
Declare Function SSSetLeftCol Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nLeftCol%)
Declare Function SSSetLineStyle Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nStyle%, ByVal crColor&, ByVal nWeight%)
Declare Function SSSetLogicalRC Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%, ByVal bIsTrue%)
Declare Function SSSetMinCol Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nMinCol%)
Declare Function SSSetMinRow Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nMinRow%)
Declare Function SSSetMaxCol Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nMaxCol%)
Declare Function SSSetMaxRow Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nMaxRow%)
Declare Function SSSetMode Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nMode%)
Declare Function SSSetNumber Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nNumber%)
Declare Function SSSetNumberFormat Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pNumberFormat$)
Declare Function SSSetNumberRC Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%, ByVal nNumber#)
Declare Function SSSetPattern Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nPattern%, ByVal crFG&, ByVal crBG&)

```



```

Declare Function SSSetPolyEditMode% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nPolyEditMode%)
Declare Function SSSetPrintArea% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pFormula$)
Declare Function SSSetPrintAreaFromSelection% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSSetPrintBottomMargin% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nMargin#)
Declare Function SSSetPrintColHeading% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bColHeading%)
Declare Function SSSetPrintFooter% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pPrintFooter$)
Declare Function SSSetPrintGridLines% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bGridLines%)
Declare Function SSSetPrintHCenter% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bHCenter%)
Declare Function SSSetPrintHeader% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pPrintHeader$)
Declare Function SSSetPrintLeftMargin% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nMargin#)
Declare Function SSSetPrintLeftToRight% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bLeftToRight%)
Declare Function SSSetPrintNoColor% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bNoColor%)
Declare Function SSSetPrintRightMargin% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nMargin#)
Declare Function SSSetPrintRowHeading% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bRowHeading%)
Declare Function SSSetPrintScale% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nScale%, ByVal bFitToPage%, ByVal nVPages%, ByVal nHPages%)
Declare Function SSSetPrintTitles% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pFormula$)
Declare Function SSSetPrintTitlesFromSelection% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSSetPrintTopMargin% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nMargin#)
Declare Function SSSetPrintVCenter% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bVCenter%)
Declare Function SSSetProtection% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bLocked%, ByVal bHidden%)
Declare Function SSSetRepaint% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bRepaint%)
Declare Function SSSetRowHeight% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nR1%, ByVal nR2%, ByVal nHeight%, ByVal bDefRowHeight%)
Declare Function SSSetRowHeightAuto% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nR1%, ByVal nC1%, ByVal nR2%, ByVal nC2%, ByVal bSetDefaults%)
Declare Function SSSetRowMode% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bRowMode%)
Declare Function SSSetRowText% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal pRowText$)
Declare Function SSSetScale% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nScale%)
Declare Function SSSetSelection% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nR1%, ByVal nC1%, ByVal nR2%, ByVal nC2%)
Declare Function SSSetSelectionRef% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pFormula$)
Declare Function SSSetShowColHeading% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bColHeading%)
Declare Function SSSetShowFormulas% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bFormulas%)
Declare Function SSSetShowGridLines% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bGridLines%)
Declare Function SSSetShowHScrollBar% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nShowHScrollBar%)
Declare Function SSSetShowRowHeading% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bRowHeading%)
Declare Function SSSetShowSelections% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nSelections%)
Declare Function SSSetShowVScrollBar% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nShowVScrollBar%)
Declare Function SSSetShowZeroValues% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bZeroValues%)
Declare Function SSSetSSEdit% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal hSSEdit&)
Declare Function SSSetTabbedText% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nStartRow%, ByVal nStartCol%, pRows%, pCols%, ByVal bValuesOnly%, ByVal pText$)
Declare Function SSSetText% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pText$)
Declare Function SSSetTextRC% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nRow%, ByVal nCol%, ByVal pText$)
Declare Function SSSetTitle% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pTitle$)
Declare Function SSSetTopLeftText% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pTopLeftText$)
Declare Function SSSetTopRow% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nTopRow%)
Declare Function SSShowActiveCell% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSSort% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nR1%, ByVal nC1%, ByVal nR2%, ByVal nC2%, ByVal bSortByRows%, pKeys%, ByVal nKeys%)
Declare Function SSSort3% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal nR1%, ByVal nC1%, ByVal nR2%, ByVal nC2%, ByVal bSortByRows%, ByVal nKey1%, ByVal nKey2%, ByVal nKey3%)
Declare Function SSSortDlg% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSStartEdit% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal bClear%, ByVal bInCellEditFocus%, ByVal bArrowsExitEditMode%)
Declare Function SSSwapTables% Lib "VTSSDLL.DLL" (ByVal hSS1&, ByVal hSS2&)
Declare Function SSTransactCommit% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSTransactRollBack% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSTransactStart% Lib "VTSSDLL.DLL" (ByVal hSS&)
Declare Function SSTwipsToRC% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal x&, ByVal y&, pRow%, pCol%)
Declare Sub SSUpdate Lib "VTSSDLL.DLL" ()
Declare Function SSVersion% Lib "VTSSDLL.DLL" ()
Declare Function SSWrite% Lib "VTSSDLL.DLL" (ByVal hSS&, ByVal pPathName$, ByVal nFileType%)
Declare Function SSWriteIO% Lib "VTSSDLL.DLL" (ByVal hSS&, dwUserData&, ByVal ioFunc&, pUserRet&)

Declare Function SSVBXCopyCellsFromDoubleArray% Lib "VTSS.VBX" (ByVal hSS&, ByVal nR1%, ByVal nC1%, ByVal nR2%, ByVal nC2%, nArray() As Double)
Declare Function SSVBXCopyCellsToDoubleArray% Lib "VTSS.VBX" (ByVal hSS&, ByVal nR1%, ByVal nC1%, ByVal nR2%, ByVal nC2%, nArray() As Double)

```

### 1.3.2. Vtchvb.txt

```
'
' vchvb.txt
'
' Copyright (c) 1994, VisualTools Inc.
'
'-----
'
'-----
' from vtdefs.h
'-----
'-----
' VtHorizontalAlignment
'   Defines the types of horizontal text alignment
'
Global Const VtHorizontalAlignmentLeft = 0
Global Const VtHorizontalAlignmentRight = 1
Global Const VtHorizontalAlignmentCenter = 2
'-----
' VtVerticalAlignment
'   Defines the types of vertical text alignment
'
Global Const VtVerticalAlignmentTop = 0
Global Const VtVerticalAlignmentBottom = 1
Global Const VtVerticalAlignmentCenter = 2
'-----
' VtOrientation
'   Defines the orientation of the text
'
Global Const VtOrientationHorizontal = 0
Global Const VtOrientationVertical = 1
Global Const VtOrientationUp = 2
Global Const VtOrientationDown = 3
'-----
' VtSortType
'
Global Const VtSortTypeNone = 0
Global Const VtSortTypeAscending = 1
Global Const VtSortTypeDescending = 2
'-----
' VtAngleUnits
'   Describes the type of angle units
'
Global Const VtAngleUnitsDegrees = 0
Global Const VtAngleUnitsRadians = 1
Global Const VtAngleUnitsGrads = 2
'-----
'-----
' from vterrors.h
'-----
'-----
' VtErrorNumber
'   error codes
```

Global Const VtOk = 0

' internal errors

Global Const VtFail = 1000

Global Const VtErrorDeletingUsedObject = 1001

Global Const VtErrorCorruptData = 1002

Global Const VtErrorNotImplemented = 1003

' general errors

Global Const VtErrorNoMemory = 1100

Global Const VtErrorInvalidArgument = 1101

Global Const VtErrorNotFound = 1102

Global Const VtErrorTooSmall = 1103

Global Const VtErrorInvalidRequest = 1104

Global Const VtErrorCorruptArchive = 1105

Global Const VtErrorArchiveVersion = 1106

Global Const VtErrorArchiveTypeMismatch = 1107

Global Const VtErrorArchivePointerMismatch = 1108

Global Const VtErrorCannotOpenFile = 1109

Global Const VtErrorUnableToLoadString = 1110

Global Const VtErrorBufferTooSmall = 1111

' persistence storage corrupted

' tried to load incompatible version

' unexpected class type

' tried to load ptr into reference

' display driver errors

Global Const VtErrorDisplay = 1500

Global Const VtErrorInvalidFontName = 1501

Global Const VtErrorInvalidFont = 1502

Global Const VtErrorNoDisplayResources = 1503

' chart errors

Global Const VtChError = 2000

Global Const VtChErrorInvalidHandle = 2001

Global Const VtChErrorNoData = 2002

Global Const VtChErrorInvalidSeriesNumber = 2003

Global Const VtChErrorInvalidAxis = 2004

.....  
.....  
' from vtdgdefs.h  
.....  
.....

.....  
' dimension types

Global Const VtDgLabelTypeLeft = 0

Global Const VtDgLabelTypeTop = 1

.....  
.....  
' from vtdrdefs.h  
.....  
.....

.....  
' VtcCoor

Type VtcCoor

    x As Single

    y As Single

End Type

.....  
' VtcRect

Type VtcRect

    min As VtcCoor

    max As VtcCoor

End Type

```

=====
' VtcCoor3
'
Type VtcCoor3
    x As Single
    y As Single
    z As Single

```

End Type

```

=====
' VtcLCoor
'
Type VtcLCoor
    x As Long
    y As Long

```

End Type

```

=====
' VtcLRect
'
Type VtcLRect
    min As VtcLCoor
    max As VtcLCoor

```

End Type

```

=====
' VtcColor
Type VtcColor
    red As Integer
    green As Integer
    blue As Integer
    automatic As Integer

```

End Type

```

=====
' VtcFont
'    font description
'
' Font Styles
Global Const VtFontStyleBold = &H1
Global Const VtFontStyleItalic = &H2
Global Const VtFontStyleOutline = &H4

```

```

' Font Effects
Global Const VtFontEffectStrikeThrough = &H100
Global Const VtFontEffectUnderline = &H200

```

```

Type VtcFont
    name As String * 48
    size As Single           ' point size
    style As Integer         ' see VtFontStyle's above
    effects As Integer       ' see VtFontEffect's above
    color As VtcColor

```

End Type

```

=====
' VtcBrush
'
' Brush Style
Global Const VtBrushStyleNull = 0
Global Const VtBrushStyleSolid = 1
Global Const VtBrushStylePattern = 2

```

Global Const VtBrushStyleHatched = 3

' Brush patterns

Global Const VtBrushPattern94Percent = 0  
 Global Const VtBrushPattern88Percent = 1  
 Global Const VtBrushPattern75Percent = 2  
 Global Const VtBrushPattern50Percent = 3  
 Global Const VtBrushPattern25Percent = 4  
 Global Const VtBrushPatternBoldHorizontal = 5  
 Global Const VtBrushPatternBoldVertical = 6  
 Global Const VtBrushPatternBoldDownDiagonal = 7  
 Global Const VtBrushPatternBoldUpDiagonal = 8  
 Global Const VtBrushPatternChecks = 9  
 Global Const VtBrushPatternWeave = 10  
 Global Const VtBrushPatternHorizontal = 11  
 Global Const VtBrushPatternVertical = 12  
 Global Const VtBrushPatternDownDiagonal = 13  
 Global Const VtBrushPatternUpDiagonal = 14  
 Global Const VtBrushPatternGrid = 15  
 Global Const VtBrushPatternTrellis = 16  
 Global Const VtBrushPatternInvertedTrellis = 17

Global Const VtBrushPatternCount = 18

' Brush Hatches

Global Const VtBrushHatchHorizontal = 0  
 Global Const VtBrushHatchVertical = 1  
 Global Const VtBrushHatchDownDiagonal = 2  
 Global Const VtBrushHatchUpDiagonal = 3  
 Global Const VtBrushHatchCross = 4  
 Global Const VtBrushHatchDiagonalCross = 5

Global Const VtBrushHatchCount = 6

Type VtcBrush

style As Integer  
 fillColor As VtcColor  
 patternColor As VtcColor  
 index As Integer

End Type

---

' VtcShadow

Global Const VtShadowStyleNull = 0  
 Global Const VtShadowStyleDrop = 1

Type VtcShadow

style As Integer  
 brush As VtcBrush  
 offset As VtcCoor

End Type

---

' VtcPen

pen styles

Global Const VtPenStyleNull = 0  
 Global Const VtPenStyleSolid = 1  
 Global Const VtPenStyleDashed = 2  
 Global Const VtPenStyleDotted = 3  
 Global Const VtPenStyleDashDot = 4  
 Global Const VtPenStyleDashDotDot = 5  
 Global Const VtPenStyleDitted = 6  
 Global Const VtPenStyleDashDit = 7

```
Global Const VtPenStyleDashDotDot = 8
Global Const VtPenStyleNative = 9
```

```
' pen join types
```

```
Global Const VtPenJoinMiter = 0
Global Const VtPenJoinRound = 1
Global Const VtPenJoinBevel = 2
```

```
' pen cap types
```

```
Global Const VtPenCapButt = 0
Global Const VtPenCapRound = 1
Global Const VtPenCapSquare = 2
```

```
Type VtcPen
```

```
    style As Integer
    join As Integer
    cap As Integer
    color As VtcColor
    width As Single
    limit As Single
```

```
End Type
```

```
-----
' VtcFrame
```

```
' frame styles
```

```
Global Const VtFrameStyleNull = 0
Global Const VtFrameStyleSingleLine = 1
Global Const VtFrameStyleDoubleLine = 2
Global Const VtFrameStyleThickInner = 3
Global Const VtFrameStyleThickOuter = 4
```

```
Type VtcFrame
```

```
    style As Integer
    color As VtcColor
    spaceColor As VtcColor
    width As Single
```

```
End Type
```

```
-----
' VtcPicture
```

```
' picture types
```

```
Global Const VtPictureTypeNull = 0
Global Const VtPictureTypeBitmap = 1 ' Implementation dependent bitmap
Global Const VtPictureTypeVector = 2 ' Implementation dependent vector
Global Const VtPictureTypeBMP = 3
Global Const VtPictureTypeWMF = 4 ' Windows Metafile
Global Const VtPictureTypeGIF = 6
Global Const VtPictureTypePCX = 7
Global Const VtPictureTypeTIFF = 8
Global Const VtPictureTypePICT = 9
```

```
' picture options
```

```
Global Const VtPictureOptionNoSizeHeader = 1
Global Const VtPictureOptionTextAsCurves = 2
```

```
' picture mapping options
```

```
Global Const VtPictureMapTypeActual = 0
Global Const VtPictureMapTypeFitted = 1
Global Const VtPictureMapTypeStretched = 2
Global Const VtPictureMapTypeTiled = 3
Global Const VtPictureMapTypeCropFitted = 4
```

```
Type VtcPicture
```

```
    type As Integer
```

```

        map As Integer
        embedded As Integer
        name As String * 64
End Type

=====

' VtcGradient
'
Global Const VtGradientStyleHorizontal = 0
Global Const VtGradientStyleVertical = 1
Global Const VtGradientStyleRectangle = 2
Global Const VtGradientStyleOval = 3

Type VtcGradient
    style As Integer
    fromColor As VtcColor
    toColor As VtcColor
End Type

=====

' VtcFill
'
Global Const VtFillStyleNull = 0          ' no brush or gradient fill
Global Const VtFillStyleBrush = 1
Global Const VtFillStyleGradient = 2

Type VtcFill
    style As Integer
    brush As VtcBrush
    gradient As VtcGradient
    picture As VtcPicture
End Type

=====

' VtcBackdrop
'
Type VtcBackdrop
    shadow As VtcShadow
    frame As VtcFrame
    fill As VtcFill
End Type

=====

' VtcMarker
'
Global Const VtMarkerStyleDash = 0
Global Const VtMarkerStylePlus = 1
Global Const VtMarkerStyleX = 2
Global Const VtMarkerStyleStar = 3
Global Const VtMarkerStyleCircle = 4
Global Const VtMarkerStyleSquare = 5
Global Const VtMarkerStyleDiamond = 6
Global Const VtMarkerStyleUpTriangle = 7
Global Const VtMarkerStyleDownTriangle = 8
Global Const VtMarkerStyleFilledCircle = 9
Global Const VtMarkerStyleFilledSquare = 10
Global Const VtMarkerStyleFilledDiamond = 11
Global Const VtMarkerStyleFilledUpTriangle = 12
Global Const VtMarkerStyleFilledDownTriangle = 13

Global Const VtMarkerStyleCount = 14

Type VtcMarker
    visible As Integer
    style As Integer
    pen As VtcPen
    width As Single
End Type

```

---

```
' VtInfiniteLight
```

```
,
```

```
Type VtInfiniteLight
```

```
    direction As VtCoor3
```

```
    intensity As Single
```

```
End Type
```

---

```
' VtProjectionType
```

```
,
```

```
Global Const VtProjectionTypePerspective = 0
```

```
Global Const VtProjectionTypeOblique = 1
```

```
Global Const VtProjectionTypeOrthogonal = 2
```

---

```
' VtSmoothingType
```

```
,
```

```
Global Const VtSmoothingTypeNone = 0
```

```
Global Const VtSmoothingTypeQuadraticBSpline = 1
```

```
Global Const VtSmoothingTypeCubicBSpline = 2
```

---

```
' VtTextLayout
```

```
,
```

```
Type VtTextLayout
```

```
    horizontalAlignment As Integer
```

```
    verticalAlignment As Integer
```

```
    orientation As Integer
```

```
    wordWrap As Integer
```

```
End Type
```

---

```
' from vtchdefs.h
```

---



---

```
' chart types
```

```
,
```

```
Global Const VtChChartType3dBar = 0
```

```
Global Const VtChChartType2dBar = 1
```

```
Global Const VtChChartType3dLine = 2
```

```
Global Const VtChChartType2dLine = 3
```

```
Global Const VtChChartType3dArea = 4
```

```
Global Const VtChChartType2dArea = 5
```

```
Global Const VtChChartType3dStep = 6
```

```
Global Const VtChChartType2dStep = 7
```

```
Global Const VtChChartType3dCombination = 8
```

```
Global Const VtChChartType2dCombination = 9
```

```
Global Const VtChChartType3dHorizontalBar = 10
```

```
Global Const VtChChartType2dHorizontalBar = 11
```

```
Global Const VtChChartType3dClusteredBar = 12
```

```
Global Const VtChChartType3dPie = 13
```

```
Global Const VtChChartType2dPie = 14
```

```
Global Const VtChChartType3dDoughnut = 15
```

```
Global Const VtChChartType2dXY = 16
```

```
Global Const VtChChartType2dPolar = 17
```

```
Global Const VtChChartType2dRadar = 18
```

```
Global Const VtChChartType2dBubble = 19
```

```
Global Const VtChChartType2dHiLo = 20
```

```
Global Const VtChChartType2dGantt = 21
```

```
Global Const VtChChartType3dGantt = 22
```

---

```
' series method types
```



```

Global Const VtChSeriesType3dBar = 0
Global Const VtChSeriesType2dBar = 1
Global Const VtChSeriesType3dHorizontalBar = 2
Global Const VtChSeriesType2dHorizontalBar = 3
Global Const VtChSeriesType3dClusteredBar = 4
Global Const VtChSeriesType3dLine = 5
Global Const VtChSeriesType2dLine = 6
Global Const VtChSeriesType3dArea = 7
Global Const VtChSeriesType2dArea = 8
Global Const VtChSeriesType3dStep = 9
Global Const VtChSeriesType2dStep = 10
Global Const VtChSeriesType2dXY = 11
Global Const VtChSeriesType2dPolar = 12
Global Const VtChSeriesType2dRadarLine = 13
Global Const VtChSeriesType2dRadarArea = 14
Global Const VtChSeriesType2dBubble = 15
Global Const VtChSeriesType2dHiLo = 16
Global Const VtChSeriesType2dHLC = 17
Global Const VtChSeriesType2dHLCRight = 18
Global Const VtChSeriesType2dOHLC = 19
Global Const VtChSeriesType2dOHLCBar = 20
Global Const VtChSeriesType2dGantt = 21
Global Const VtChSeriesType3dGantt = 22
Global Const VtChSeriesType3dPie = 23
Global Const VtChSeriesType2dPie = 24
Global Const VtChSeriesType3dDoughnut = 25
Global Const VtChSeriesType2dDates = 26

'-----
' chart part types
'
Global Const VtChPartTypeChart = 0
Global Const VtChPartTypeTitle = 1
Global Const VtChPartTypeFootnote = 2
Global Const VtChPartTypeLegend = 3
Global Const VtChPartTypePlot = 4
Global Const VtChPartTypeSeries = 5
Global Const VtChPartTypeSeriesLabel = 6
Global Const VtChPartTypePoint = 7
Global Const VtChPartTypePointLabel = 8
Global Const VtChPartTypeAxis = 9
Global Const VtChPartTypeAxisLabel = 10
Global Const VtChPartTypeAxisTitle = 11

'-----
' chart location
'
Global Const VtChLocationTypeTopLeft = 0
Global Const VtChLocationTypeTop = 1
Global Const VtChLocationTypeTopRight = 2
Global Const VtChLocationTypeLeft = 3
Global Const VtChLocationTypeRight = 4
Global Const VtChLocationTypeBottomLeft = 5
Global Const VtChLocationTypeBottom = 6
Global Const VtChLocationTypeBottomRight = 7
Global Const VtChLocationTypeCustom = 8

'-----
' VtChLabelComponents
'
Global Const VtChLabelComponentValue = &H1
Global Const VtChLabelComponentPercent = &H2
Global Const VtChLabelComponentSeriesName = &H4
Global Const VtChLabelComponentDataPointName = &H8

'-----
' VtChLabelLineStyle
'
Global Const VtChLabelLineStyleNone = 0
Global Const VtChLabelLineStyleStraight = 1

```

Global Const VtChLabelLineStyleBent = 2

---

' VtChLabelLocationType

Global Const VtChLabelLocationTypeNone = 0  
 Global Const VtChLabelLocationTypeAbovePoint = 1  
 Global Const VtChLabelLocationTypeBelowPoint = 2  
 Global Const VtChLabelLocationTypeCenter = 3  
 Global Const VtChLabelLocationTypeBase = 4  
 Global Const VtChLabelLocationTypeInside = 5  
 Global Const VtChLabelLocationTypeOutside = 6  
 Global Const VtChLabelLocationTypeLeft = 7  
 Global Const VtChLabelLocationTypeRight = 8

---

' VtChSubPlotLabelLocationType

Describes the subchart label position

Global Const VtChSubPlotLabelLocationTypeNone = 0  
 Global Const VtChSubPlotLabelLocationTypeAbove = 1  
 Global Const VtChSubPlotLabelLocationTypeBelow = 2  
 Global Const VtChSubPlotLabelLocationTypeCenter = 3

---

' VtChPieWeightBasis

Describes the basis of weighting for pie charts

Global Const VtChPieWeightBasisNone = 0 ' all pies are the same size  
 Global Const VtChPieWeightBasisTotal = 1 ' pie size based on % of total of largest pie total  
 Global Const VtChPieWeightBasisSeries = 2 ' pie size ratios set by first series values

---

' VtChPieWeightStyle

Describes how the weighting factor is applied.

Global Const VtChPieWeightStyleArea = 0  
 Global Const VtChPieWeightStyleDiameter = 1

---

' VtChAxisId

Describes the axis Id

Global Const VtChAxisIdX = 0  
 Global Const VtChAxisIdY = 1  
 Global Const VtChAxisIdY2 = 2  
 Global Const VtChAxisIdZ = 3

---

' VtChDateIntervalType

Describes the types of date intervals for date axes

Global Const VtChDateIntervalTypeNone = 0 ' no interval  
 Global Const VtChDateIntervalTypeDaily = 1 ' each day  
 Global Const VtChDateIntervalTypeWeekly = 2 ' each week  
 Global Const VtChDateIntervalTypeSemimonthly = 3 ' 1st and 15th each month  
 Global Const VtChDateIntervalTypeMonthly = 4 ' each month  
 Global Const VtChDateIntervalTypeYearly = 5 ' each year

---

' VtChScaleType

Describes the type of scaling for value or polar axes

Global Const VtChScaleTypeLinear = 0  
 Global Const VtChScaleTypeLogarithmic = 1  
 Global Const VtChScaleTypePercent = 2

```

' VtChPercentAxisBasis
'   Describes the type of percent axis scaling
'
Global Const VtChPercentAxisBasisMaxChart = 0 ' % of chart's maximum value
Global Const VtChPercentAxisBasisMaxRow = 1 ' % of division maximum value
Global Const VtChPercentAxisBasisMaxColumn = 2 ' % of series maximum value
Global Const VtChPercentAxisBasisSumChart = 3 ' % of chart's sum
Global Const VtChPercentAxisBasisSumRow = 4 ' % of division sum
Global Const VtChPercentAxisBasisSumColumn = 5 ' % of series sum

```

```

' VtChAxisTickStyle
'   Describes the type of axis tick
'
Global Const VtChAxisTickStyleNone = 0
Global Const VtChAxisTickStyleCenter = 1
Global Const VtChAxisTickStyleInside = 2
Global Const VtChAxisTickStyleOutside = 3

```

```

' Series statistics flags
'
Global Const VtChStatsMinimum = &H1
Global Const VtChStatsMaximum = &H2
Global Const VtChStatsMean = &H4
Global Const VtChStatsStddev = &H8
Global Const VtChStatsRegression = &H10

```

## " Printing information

```

' print scale types
Global Const VtPrintScaleTypeActual = 0
Global Const VtPrintScaleTypeFitted = 1
Global Const VtPrintScaleTypeStretched = 2

```

```

' print orientations
Global Const VtPrintOrientationPortrait = 0
Global Const VtPrintOrientationLandscape = 1

```

```

Type VtChPrintInformation
    scaleType As Integer
    orientation As Integer

    topMargin As Single
    bottomMargin As Single
    leftMargin As Single
    rightMargin As Single

    centerHorizontally As Integer
    centerVertically As Integer

    monochrome As Integer
    layoutForPrinter As Integer

```

End Type

## " events

### ' mouse flags

```

Global Const VtChMouseFlagShiftKeyDown = &H4
Global Const VtChMouseFlagControlKeyDown = &H8

```

---

**" Formula One Link modes**

Global Const VtChSsLinkModeOff = 0

Global Const VtChSsLinkModeOn = 1

Global Const VtChSsLinkModeAutoParse = 2

---

**" VtDcType**

Global Const VtDcTypeNull = 0

Global Const VtDcTypeDisplay = 1

Global Const VtDcTypePrinter = 2

Global Const VtDcTypeMetafile = 3

---

**" VtTextLengthType**

Global Const VtTextLengthTypeVirtual = 0

Global Const VtTextLengthTypeDevice = 1

---

**" VtChDrawMode**

Global Const VtChDrawModeDraw = 0

Global Const VtChDrawModeBlit = 1

---



---

**" DLL methods**

Declare Function VtChGetDLLVersion Lib "VTCHDLL.DLL" (major As Integer, minor As Integer) As Long

---

**" chart methods**

Declare Function VtChLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long) As Long

Declare Function VtChDraw Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal hdc As Integer, ByVal hdcType As Integer, rect As VtCLRect, ByVal layout As Integer, ByVal stretch As Integer) As Long

Declare Function VtChGetBitmap Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal options As Integer, handle As Integer) As Long

Declare Function VtChGetMetaFile Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal options As Integer, handle As Integer, xSize As Long, ySize As Long) As Long

---

**" user interface support**

Declare Function VtChActivateFormatMenu Lib "VTCHDLL.DLL" (ByVal hChart As Long, mPoint As VtCLCoor) As Long

Declare Function VtChGetAllowUserChanges Lib "VTCHDLL.DLL" (ByVal hChart As Long, allowUserChanges As Integer) As Long

Declare Function VtChSetAllowUserChanges Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal allowUserChanges As Integer) As Long

Declare Function VtChGetDrawMode Lib "VTCHDLL.DLL" (ByVal hChart As Long, drawMode As Integer) As Long

Declare Function VtChSetDrawMode Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal drawMode As Integer) As Long

Declare Function VtChGetTextLengthType Lib "VTCHDLL.DLL" (ByVal hChart As Long, textLengthType As Integer) As Long

Declare Function VtChSetTextLengthType Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal textLengthType As Integer) As Long

```
Declare Function VtChEditCopy Lib "VTCHDLL.DLL" (ByVal hChart As Long) As Long
```

```
Declare Function VtChEditPaste Lib "VTCHDLL.DLL" (ByVal hChart As Long) As Long
```

```
*****  
" mouse support  
"
```

```
Declare Function VtChActivateSelection Lib "VTCHDLL.DLL" (ByVal hChart As Long) As Long
```

```
Declare Function VtChGetSelectedPart Lib "VTCHDLL.DLL" (ByVal hChart As Long, part As Integer, index1 As Integer, index2  
As Integer, index3 As Integer, index4 As Integer) As Long
```

```
Declare Function VtChPointToChartPart Lib "VTCHDLL.DLL" (ByVal hChart As Long, mpos As VtcLCoor, part As Integer,  
index1 As Integer, index2 As Integer, index3 As Integer, index4 As Integer) As Long
```

```
Declare Function VtChSelectPart Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal part As Integer, ByVal index1 As Integer,  
ByVal index2 As Integer, ByVal index3 As Integer, ByVal index4 As Integer) As Long
```

```
Declare Function VtChTwipsToChartPart Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal x As Long, ByVal y As Long,  
part As Integer, index1 As Integer, index2 As Integer, index3 As Integer, index4 As Integer) As Long
```

```
*****  
" printing methods  
"
```

```
Declare Function VtChGetPrintInformation Lib "VTCHDLL.DLL" (ByVal hChart As Long, aPrintInformation As  
VtcChPrintInformation) As Long
```

```
Declare Function VtChSetPrintInformation Lib "VTCHDLL.DLL" (ByVal hChart As Long, aPrintInformation As  
VtcChPrintInformation) As Long
```

```
Declare Function VtChPrint Lib "VTCHDLL.DLL" (ByVal hChart As Long) As Long
```

```
Declare Function VtChPrintCopies Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal copies As Integer) As Long
```

```
Declare Function VtChPrintSetup Lib "VTCHDLL.DLL" (ByVal hChart As Long) As Long
```

```
*****  
" chart read/write methods  
"
```

```
Declare Function VtChReadFromFile Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal fileName As String) As Long
```

```
Declare Function VtChWriteToFile Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal fileName As String) As Long
```

```
Declare Function VtChWritePictureToFile Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal fileName As String, ByVal  
pictureType As Integer, ByVal options As Integer) As Long
```

```
*****  
" chart attribute functions  
"
```

```
Declare Function VtChGetActiveSeriesCount Lib "VTCHDLL.DLL" (ByVal hChart As Long, count As Integer) As Long
```

```
Declare Function VtChGetChartBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, aBackdrop As VtcBackdrop) As Long
```

```
Declare Function VtChGetChartType Lib "VTCHDLL.DLL" (ByVal hChart As Long, chartType As Integer) As Long
```

```
Declare Function VtChSetChartBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, aBackdrop As VtcBackdrop) As Long
```

```
Declare Function VtChSetChartType Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal chartType As Integer) As Long
```

```
Declare Function VtChSetStacking Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal stacking As Integer) As Long
```

```
Declare Function VtChSetToDefaults Lib "VTCHDLL.DLL" (ByVal hChart As Long) As Long
```

```

' chart data functions
'

Declare Function VtChDeleteColumns Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal column As Integer, ByVal count As Integer) As Long

Declare Function VtChDeleteColumnLabels Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal labelIndex As Integer, ByVal count As Integer) As Long

Declare Function VtChDeleteRows Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal row As Integer, ByVal count As Integer) As Long

Declare Function VtChDeleteRowLabels Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal labelIndex As Integer, ByVal count As Integer) As Long

Declare Function VtChGetColumnCount Lib "VTCHDLL.DLL" (ByVal hChart As Long, count As Integer) As Long

Declare Function VtChGetColumnLabel Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal column As Integer, ByVal labelIndex As Integer, ByVal label As String, ByVal bufferSize As Integer) As Long

Declare Function VtChGetColumnLabelCount Lib "VTCHDLL.DLL" (ByVal hChart As Long, count As Integer) As Long

Declare Function VtChGetCompositeColumnLabel Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal column As Integer, ByVal label As String, ByVal bufferSize As Integer) As Long

Declare Function VtChGetCompositeRowLabel Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal row As Integer, ByVal label As String, ByVal bufferSize As Integer) As Long

Declare Function VtChGetData Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal row As Integer, ByVal column As Integer, dataPoint As Double, nullFlag As Integer) As Long

Declare Function VtChGetRowCount Lib "VTCHDLL.DLL" (ByVal hChart As Long, count As Integer) As Long

Declare Function VtChGetRowLabel Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal row As Integer, ByVal labelIndex As Integer, ByVal label As String, ByVal bufferSize As Integer) As Long

Declare Function VtChGetRowLabelCount Lib "VTCHDLL.DLL" (ByVal hChart As Long, count As Integer) As Long

Declare Function VtChInitializeLabels Lib "VTCHDLL.DLL" (ByVal hChart As Long) As Long

Declare Function VtChInsertColumns Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal column As Integer, ByVal count As Integer) As Long

Declare Function VtChInsertRows Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal row As Integer, ByVal count As Integer) As Long

Declare Function VtChInsertColumnLabels Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal labelIndex As Integer, ByVal count As Integer) As Long

Declare Function VtChInsertRowLabels Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal labelIndex As Integer, ByVal count As Integer) As Long

Declare Function VtChRandomFill Lib "VTCHDLL.DLL" (ByVal hChart As Long) As Long

Declare Function VtChSetColumnCount Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal count As Integer) As Long

Declare Function VtChSetColumnLabel Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal column As Integer, ByVal labelIndex As Integer, ByVal label As String) As Long

Declare Function VtChSetColumnLabelCount Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal count As Integer) As Long

Declare Function VtChSetData Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal row As Integer, ByVal column As Integer, ByVal dataPoint As Double, ByVal nullFlag As Integer) As Long

Declare Function VtChSetRowCount Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal count As Integer) As Long

```

```
Declare Function VtChSetRowLabel Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal row As Integer, ByVal labelIndex As Integer, ByVal label As String) As Long
```

```
Declare Function VtChSetRowLabelCount Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal count As Integer) As Long
```

```
Declare Function VtChSetSize Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal rowLabelCount As Integer, ByVal columnLabelCount As Integer, ByVal dataRowCount As Integer, ByVal dataColumnCount As Integer) As Long
```

```
=====
' Chart title functions
'
```

```
Declare Function VtChGetTitle Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal title As String, ByVal bufferSize As Integer) As Long
```

```
Declare Function VtChGetTitleBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, aBackdrop As VtcBackdrop) As Long
```

```
Declare Function VtChGetTitleFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, aFont As VtcFont) As Long
```

```
Declare Function VtChGetTitleLocation Lib "VTCHDLL.DLL" (ByVal hChart As Long, visible As Integer, locationType As Integer, location As VtcRect) As Long
```

```
Declare Function VtChGetTitleTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, layout As VtcTextLayout) As Long
```

```
Declare Function VtChSetTitle Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal title As String) As Long
```

```
Declare Function VtChSetTitleBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, aBackdrop As VtcBackdrop) As Long
```

```
Declare Function VtChSetTitleFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, aFont As VtcFont) As Long
```

```
Declare Function VtChSetTitleLocation Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal visible As Integer, ByVal locationType As Integer, location As VtcRect) As Long
```

```
Declare Function VtChSetTitleTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, layout As VtcTextLayout) As Long
```

```
=====
' Chart footnote functions
'
```

```
Declare Function VtChGetFootnote Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal footnote As String, ByVal bufferSize As Integer) As Long
```

```
Declare Function VtChGetFootnoteBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, aBackdrop As VtcBackdrop) As Long
```

```
Declare Function VtChGetFootnoteFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, aFont As VtcFont) As Long
```

```
Declare Function VtChGetFootnoteLocation Lib "VTCHDLL.DLL" (ByVal hChart As Long, visible As Integer, locationType As Integer, location As VtcRect) As Long
```

```
Declare Function VtChGetFootnoteTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, layout As VtcTextLayout) As Long
```

```
Declare Function VtChSetFootnote Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal footnote As String) As Long
```

```
Declare Function VtChSetFootnoteBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, aBackdrop As VtcBackdrop) As Long
```

```
Declare Function VtChSetFootnoteFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, aFont As VtcFont) As Long
```

```
Declare Function VtChSetFootnoteLocation Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal visible As Integer, ByVal locationType As Integer, location As VtcRect) As Long
```

```
Declare Function VtChSetFootnoteTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, layout As VtcTextLayout) As Long
```

```
=====
' Chart legend functions
'
```

Declare Function VtChGetLegendBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, aBackdrop As VtcBackdrop) As Long

Declare Function VtChGetLegendFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, aFont As VtcFont) As Long

Declare Function VtChGetLegendLocation Lib "VTCHDLL.DLL" (ByVal hChart As Long, visible As Integer, locationType As Integer, location As VtcRect) As Long

Declare Function VtChGetLegendTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, layout As VtcTextLayout) As Long

Declare Function VtChSetLegendBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, aBackdrop As VtcBackdrop) As Long

Declare Function VtChSetLegendFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, aFont As VtcFont) As Long

Declare Function VtChSetLegendLocation Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal visible As Integer, ByVal locationType As Integer, location As VtcRect) As Long

Declare Function VtChSetLegendTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, layout As VtcTextLayout) As Long

.....  
' Axis properties

Declare Function VtChGetAxisCategoryScale Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, auto As Integer, divisionsPerLabel As Integer, divisionsPerTick As Integer) As Long

Declare Function VtChGetAxisDateScale Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, auto As Integer, min#, max#, majIntrvl As Integer, majFreq%, minIntrvl As Integer, minFreq%, skipWkends As Integer) As Long

Declare Function VtChGetAxisGrid Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, majorPen As VtcPen, minorPen As VtcPen) As Long

Declare Function VtChGetAxisIntersection Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, auto As Integer, intersectionPoint As Double, labelsInsidePlot As Integer) As Long

Declare Function VtChGetAxisPen Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, edgePen As VtcPen) As Long

Declare Function VtChGetAxisTicks Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, length As Single, style As Integer) As Long

Declare Function VtChGetAxisType Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, hideAxis As Integer, scaleType As Integer, logBase As Integer, percentBasis As Integer) As Long

Declare Function VtChGetAxisValueScale Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, auto As Integer, minimum As Double, maximum As Double, majorDivisions As Integer, minorDivisions As Integer) As Long

Declare Function VtChSetAxisCategoryScale Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, ByVal auto%, ByVal divisionsPerLabel As Integer, ByVal divisionsPerTick As Integer) As Long

Declare Function VtChSetAxisDateScale Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, ByVal auto%, ByVal min#, ByVal max#, ByVal majInt%, ByVal majFreq%, ByVal majInt%, ByVal minFreq%, ByVal skipWend%) As Long

Declare Function VtChSetAxisGrid Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, majorPen As VtcPen, minorPen As VtcPen) As Long

Declare Function VtChSetAxisIntersection Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, ByVal auto%, ByVal intersectionPoint As Double, ByVal labelsInsidePlot As Integer) As Long

Declare Function VtChSetAxisPen Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, edgePen As VtcPen) As Long

Declare Function VtChSetAxisTicks Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, length As Single, style As Integer) As Long

Declare Function VtChSetAxisType Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, hideAxis As Integer, scaleType As Integer, logBase As Integer, percentBasis As Integer) As Long



Declare Function VtChSetAxisValueScale Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, ByVal auto As Integer, ByVal min As Double, ByVal max As Double, ByVal majorDivs%, ByVal minorDivs%) As Long

.....  
' axis label properties  
,

Declare Function VtChGetAxisLabelBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal axisIndex As Integer, ByVal level As Integer, backdrop As VtcBackdrop) As Long

Declare Function VtChGetAxisLabelFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal axisIndex As Integer, ByVal level As Integer, font As VtcFont) As Long

Declare Function VtChGetAxisLabelFormatString Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal axisIndex As Integer, ByVal level As Integer, ByVal formatString As String, ByVal bufferSize As Integer) As Long

Declare Function VtChGetAxisLabelTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal axisIndex As Integer, ByVal level As Integer, auto As Integer, standing As Integer, layout As VtcTextLayout) As Long

Declare Function VtChSetAxisLabelBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal axisIndex As Integer, ByVal level As Integer, backdrop As VtcBackdrop) As Long

Declare Function VtChSetAxisLabelFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal axisIndex As Integer, ByVal level As Integer, font As VtcFont) As Long

Declare Function VtChSetAxisLabelFormatString Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal axisIndex As Integer, ByVal level As Integer, ByVal formatString As String) As Long

Declare Function VtChSetAxisLabelTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal axisIndex As Integer, ByVal level As Integer, ByVal auto As Integer, ByVal standing As Integer, layout As VtcTextLayout) As Long

.....  
' axis title properties  
,

Declare Function VtChGetAxisTitle Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, ByVal title As String, ByVal bufferSize As Integer) As Long

Declare Function VtChGetAxisTitleBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, backdrop As VtcBackdrop) As Long

Declare Function VtChGetAxisTitleFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, font As VtcFont) As Long

Declare Function VtChGetAxisTitleVisible Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, visible As Integer) As Long

Declare Function VtChGetAxisTitleTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, layout As VtcTextLayout) As Long

Declare Function VtChSetAxisTitle Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, ByVal title As String) As Long

Declare Function VtChSetAxisTitleBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, backdrop As VtcBackdrop) As Long

Declare Function VtChSetAxisTitleFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, font As VtcFont) As Long

Declare Function VtChSetAxisTitleVisible Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, visible As Integer) As Long

Declare Function VtChSetAxisTitleTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal axis As Integer, ByVal index As Integer, layout As VtcTextLayout) As Long

.....

' Chart plot functions  
,

**Declare Function** VtChGetAngleUnits Lib "VTCHDLL.DLL" (ByVal hChart As Long, angleUnits As Integer) As Long

**Declare Function** VtChGetBaseAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, baseHeight As Single, brush As VtcBrush, pen As VtcPen) As Long

**Declare Function** VtChGetBubbleAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, maxBubbleToAxisRatio As Single) As Long

**Declare Function** VtChGetDoughnutAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, interiorRatio As Single, sides As Integer) As Long

**Declare Function** VtChGetWallAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, wallWidth As Single, brush As VtcBrush, pen As VtcPen) As Long

**Declare Function** VtChGetPieAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, thicknessRatio As Single, topRadiusRatio As Single) As Long

**Declare Function** VtChGetPlotBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, aBackdrop As VtcBackdrop) As Long

**Declare Function** VtChGetPlotClockwise Lib "VTCHDLL.DLL" (ByVal hChart As Long, clockwise As Integer) As Long

**Declare Function** VtChGetPlotGaps Lib "VTCHDLL.DLL" (ByVal hChart As Long, barGap As Single, xGap As Single, zGap As Single) As Long

**Declare Function** VtChGetPlotLocation Lib "VTCHDLL.DLL" (ByVal hChart As Long, custom As Integer, location As VtcRect) As Long

**Declare Function** VtChGetPlotRatios Lib "VTCHDLL.DLL" (ByVal hChart As Long, widthToHeightRatio As Single, depthToHeightRatio As Single) As Long

**Declare Function** VtChGetPlotSort Lib "VTCHDLL.DLL" (ByVal hChart As Long, sort As Integer) As Long

**Declare Function** VtChGetPlotWeighting Lib "VTCHDLL.DLL" (ByVal hChart As Long, basis As Integer, style As Integer) As Long

**Declare Function** VtChGetPerspective Lib "VTCHDLL.DLL" (ByVal hChart As Long, perspective As VtcCoor3) As Long

**Declare Function** VtChGetProjection Lib "VTCHDLL.DLL" (ByVal hChart As Long, projection As Integer) As Long

**Declare Function** VtChGetScaleAngle Lib "VTCHDLL.DLL" (ByVal hChart As Long, scaleAngle As Single) As Long

**Declare Function** VtChGetStartingAngle Lib "VTCHDLL.DLL" (ByVal hChart As Long, startingAngle As Single) As Long

**Declare Function** VtChGetSubPlotLabelPosition Lib "VTCHDLL.DLL" (ByVal hChart As Long, location As Integer) As Long

**Declare Function** VtChGet3DView Lib "VTCHDLL.DLL" (ByVal hChart As Long, rotation As Single, elevation As Single) As Long

**Declare Function** VtChSetAngleUnits Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal angleUnits As Integer) As Long

**Declare Function** VtChSetBaseAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal baseHeight As Single, brush As VtcBrush, pen As VtcPen) As Long

**Declare Function** VtChSetBubbleAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal maxBubbleToAxisRatio As Single) As Long

**Declare Function** VtChSetDoughnutAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal interiorRatio As Single, ByVal sides As Integer) As Long

**Declare Function** VtChSetWallAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal wallWidth As Single, brush As VtcBrush, pen As VtcPen) As Long

**Declare Function** VtChSetPieAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal thicknessRatio As Single, ByVal topRadiusRatio As Single) As Long

**Declare Function** VtChSetPlotBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, aBackdrop As VtcBackdrop) As Long

**Declare Function** VtChSetPlotClockwise Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal clockwise As Integer) As Long

**Declare Function** VtChSetPlotGaps Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal barGap As Single, ByVal xGap As Single, ByVal zGap As Single) As Long

**Declare Function** VtChSetPlotLocation Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal custom As Integer, location As VtcRect) As Long

**Declare Function** VtChSetPlotRatios Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal widthToHeightRatio As Single, ByVal depthToHeightRatio As Single) As Long

**Declare Function** VtChSetPlotSort Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal sort As Integer) As Long

**Declare Function** VtChSetPlotWeighting Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal basis As Integer, ByVal style As Integer) As Long

**Declare Function** VtChSetPerspective Lib "VTCHDLL.DLL" (ByVal hChart As Long, perspective As VtcCoor3) As Long

**Declare Function** VtChSetProjection Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal projection As Integer) As Long

**Declare Function** VtChSetScaleAngle Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal scaleAngle As Single) As Long

**Declare Function** VtChSetStartingAngle Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal startingAngle As Single) As Long

**Declare Function** VtChSetSubPlotLabelPosition Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal location As Integer) As Long

**Declare Function** VtChSet3DView Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal rotation As Single, ByVal elevation As Single) As Long

---

**' plot lighting properties**

**Declare Function** VtChAddLight Lib "VTCHDLL.DLL" (ByVal hChart As Long, light As VtcInfiniteLight) As Long

**Declare Function** VtChGetLightCount Lib "VTCHDLL.DLL" (ByVal hChart As Long, count As Integer) As Long

**Declare Function** VtChGetLight Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal index As Integer, light As VtcInfiniteLight) As Long

**Declare Function** VtChRemoveLight Lib "VTCHDLL.DLL" (ByVal hChart As Long, light As VtcInfiniteLight) As Long

**Declare Function** VtChRemoveLightByIndex Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal index As Integer) As Long

**Declare Function** VtChGetAmbientLight Lib "VTCHDLL.DLL" (ByVal hChart As Long, ambientLightIntensity As Single) As Long

**Declare Function** VtChGetEdgeLight Lib "VTCHDLL.DLL" (ByVal hChart As Long, useEdgeLight As Integer, edgeLightIntensity As Single) As Long

**Declare Function** VtChSetAmbientLight Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal ambientLightIntensity As Single) As Long

**Declare Function** VtChSetEdgeLight Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal useEdgeLight As Integer, ByVal edgeLightIntensity As Single) As Long

---

**' chart series properties**

**Declare Function** VtChGetSeriesBarAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, sides As Integer, topRatio As Single) As Long

**Declare Function** VtChGetSeriesGuideLinePen Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, pen As VtcPen) As Long

**Declare Function** VtChGetSeriesHiLoAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, gainColor As VtcColor, lossColor As VtcColor) As Long

**Declare Function** VtChGetSeriesMarkersAndLines Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, autoMarkers As Integer, showMarkers As Integer, showLines As Integer) As Long

**Declare Function** VtChGetSeriesType Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, seriesType As Integer) As Long

**Declare Function** VtChGetSeriesPen Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, pen As VtcPen) As Long

**Declare Function** VtChGetSeriesPosition Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, excluded As Integer, hidden As Integer, order As Integer, stackOrder As Integer) As Long

**Declare Function** VtChGetSeriesSecondaryAxis Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, secondaryAxis As Integer) As Long

**Declare Function** VtChGetSeriesSmoothing Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, smoothingType As Integer, smoothingFactor As Integer) As Long

**Declare Function** VtChGetSeriesGuideLines Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal axisId As Integer, showGuideLines As Integer) As Long

**Declare Function** VtChSetSeriesBarAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal sides As Integer, ByVal topRatio As Single) As Long

**Declare Function** VtChSetSeriesGuideLinePen Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, pen As VtcPen) As Long

**Declare Function** VtChSetSeriesHiLoAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, gainColor As VtcColor, lossColor As VtcColor) As Long

**Declare Function** VtChSetSeriesMarkersAndLines Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal autoMarkers As Integer, ByVal showMarkers As Integer, ByVal showLines As Integer) As Long

**Declare Function** VtChSetSeriesType Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal seriesType As Integer) As Long

**Declare Function** VtChSetSeriesPen Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, pen As VtcPen) As Long

**Declare Function** VtChSetSeriesPosition Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal excluded As Integer, ByVal hidden As Integer, ByVal order As Integer, ByVal stackOrder As Integer) As Long

**Declare Function** VtChSetSeriesSecondaryAxis Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal secondaryAxis As Integer) As Long

**Declare Function** VtChSetSeriesSmoothing Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal smoothingType As Integer, ByVal smoothingFactor As Integer) As Long

**Declare Function** VtChSetSeriesGuideLines Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal axisId As Integer, ByVal showGuideLines As Integer) As Long

---

series stat lines properties

**Declare Function** VtChGetSeriesStatLines Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, flags As Integer) As Long

**Declare Function** VtChGetSeriesStatLinesAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, lineColor As VtcColor, lineWidth As Single) As Long

**Declare Function** VtChGetSeriesStatLinesStyle Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal statType As Integer, style As Integer) As Long

**Declare Function** VtChSetSeriesStatLines Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal flags As Integer) As Long

**Declare Function** VtChSetSeriesStatLinesAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, lineColor As VtcColor, ByVal lineWidth As Single) As Long

**Declare Function** VtChSetSeriesStatLinesStyle Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal statType As Integer, ByVal style As Integer) As Long

---

**" chart series label properties**

**Declare Function** VtChGetSeriesLabel Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal buffer As String, ByVal bufferSize As Integer) As Long

**Declare Function** VtChGetSeriesLabelAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, location As Integer, lineStyle As Integer, offset As VtcCoord) As Long

**Declare Function** VtChGetSeriesLabelBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, aBackdrop As VtcBackdrop) As Long

**Declare Function** VtChGetSeriesLabelFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, aFont As VtcFont) As Long

**Declare Function** VtChGetSeriesLabelTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, layout As VtcTextLayout) As Long

**Declare Function** VtChGetSeriesLegendText Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal buffer As String, ByVal bufferSize As Integer) As Long

**Declare Function** VtChSetSeriesLabel Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal text As String) As Long

**Declare Function** VtChSetSeriesLabelAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal location As Integer, ByVal lineStyle As Integer, offset As VtcCoord) As Long

**Declare Function** VtChSetSeriesLabelBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, aBackdrop As VtcBackdrop) As Long

**Declare Function** VtChSetSeriesLabelFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, aFont As VtcFont) As Long

**Declare Function** VtChSetSeriesLabelTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, layout As VtcTextLayout) As Long

**Declare Function** VtChSetSeriesLegendText Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal text As String) As Long

---

**" point properties**

**Declare Function** VtChGetPointAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, brush As VtcBrush, edgePen As VtcPen, marker As VtcMarker) As Long

**Declare Function** VtChGetPointPicture Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, picture As VtcPicture) As Long

**Declare Function** VtChGetPointOffset Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, offset As Single) As Long

**Declare Function** VtChResetCustomPoint Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer) As Long

**Declare Function** VtChResetCustomPointLabel Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer) As Long

**Declare Function** VtChSetPointAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, brush As VtcBrush, edgePen As VtcPen, marker As VtcMarker) As Long

**Declare Function** VtChSetPointPicture Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, picture As VtcPicture) As Long

**Declare Function** VtChSetPointOffset Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, ByVal offset As Single) As Long

```

" point label properties
"

```

```

Declare Function VtChGetPointLabel Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, ByVal buffer As String, ByVal bufferSize As Integer) As Long

```

```

Declare Function VtChGetPointLabelAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, location As Integer, custom As Integer, components As Integer, lineStyle As Integer) As Long

```

```

Declare Function VtChGetPointLabelBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, aBackdrop As VtcBackdrop) As Long

```

```

Declare Function VtChGetPointLabelFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, aFont As VtcFont) As Long

```

```

Declare Function VtChGetPointLabelFormatStrings Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, ByVal valueFmt As String, ByVal valLen As Integer, ByVal pctFmt As String, ByVal pctLen As Integer) As Long

```

```

Declare Function VtChGetPointLabelOffset Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, offset As VtcCoord) As Long

```

```

Declare Function VtChGetPointLabelTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, layout As VtcTextLayout) As Long

```

```

Declare Function VtChSetPointLabel Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, ByVal text As String) As Long

```

```

Declare Function VtChSetPointLabelAttributes Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, ByVal location%, ByVal custom As Integer, ByVal components As Integer, ByVal lineStyle As Integer) As Long

```

```

Declare Function VtChSetPointLabelBackdrop Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, aBackdrop As VtcBackdrop) As Long

```

```

Declare Function VtChSetPointLabelFont Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, aFont As VtcFont) As Long

```

```

Declare Function VtChSetPointLabelFormatStrings Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, ByVal valueFormatBuffer As String, ByVal percentFormatBuffer As String) As Long

```

```

Declare Function VtChSetPointLabelOffset Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, offset As VtcCoord) As Long

```

```

Declare Function VtChSetPointLabelTextLayout Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal series As Integer, ByVal dataPoint As Integer, layout As VtcTextLayout) As Long

```

```

' Array functions
'

```

```

Declare Function VtChCopyDataToDoubleArray Lib "VTCHVBX.DLL" (ByVal hChart As Long, ByVal top As Integer, ByVal theLeft As Integer, ByVal bottom As Integer, ByVal theRight As Integer, array() As Double) As Long

```

```

Declare Function VtChCopyDataFromDoubleArray Lib "VTCHVBX.DLL" (ByVal hChart As Long, ByVal top As Integer, ByVal theLeft As Integer, ByVal bottom As Integer, ByVal theRight As Integer, array() As Double) As Long

```

```

' spreadsheet link properties
'

```

```

Declare Function VtChGetSsLinkProperties Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal sheetName As String, ByVal sheetNameSize As Integer, ByVal formula As String, ByVal formulaBufferSize As Integer, linkMode As Integer, linked%) As Long

```

```

Declare Function VtChSetSsLinkProperties Lib "VTCHDLL.DLL" (ByVal hChart As Long, ByVal sheetName As String, ByVal formula As String, ByVal linkMode%) As Long

```